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THE THEORIKE AND PRACTIKE OF MODERNE WARRES.

Discourſed in Dialogue vviſe.

VVHEREIN IS DECLARED THE NEGLECT OF Martiall diſcipline: the inconuenience thereof: the imperfections of manie training Captaines: a redreſſe by due regard had: the fitteſt weapons for our Moderne VVarre: the vſe of the ſame: the parts of a perfect ſouldier in generall and in particular: the Officers in degrees, with their ſeuerall duties: the imbattailing of men in formes now moſt in vſe: with figures and Tables to the ſame: with ſundrie other martiall points. VVritten by ROBERT BARRET.

Comprehended in ſixe Bookes.

Ozar morir, de la vida.

Johannes Busby Miles
Comendo Tutus



LONDON,
Printed for VVilliam Ponſonby.
1598.



BRITISH MUSEUM
45. b. 38. 1538.

TO THE RIGHT HONORABLE MY SINGVLAR GOOD LORD, HENRIE EARLE OF PEMBROKE, LORD HARBERT OF Cardiffe, Marmion, and Saint Quintin, Lord Preſident of her Maieſties Councell eſtabliſhed in the Principalitie and dominions of VVales, and the Marches of the ſame; of the moſt noble order of the Garter, knight; Lord Lieutenant within the Principalitie and dominions of South VVales and North VVales, and the Marches thereto adioyning; and of the Counties of VVilt and Sommerſet, &c.

RIght Honourable, hauing ſpent the moſt part of my time in the profeſsion of Armes, and that among forraine nations, as the French, the Dutch, the Italian, and Spaniard, I haue bene moued by ſundry my friends, to ſet downe in writing ſuch Martial points, as I haue noted, gathered, or learned from them, whereby, ſuch young Gentlemen, and others, my willing countrie men, as haue not, as yet, entred within the boundes of *Mars* his bloudy field, may, at the laſt, gather ſome inſtructions, to be the readier at the Alarme giuen: the which ſeemeth not farre off. And ſith my principall ſcope and purpoſe hath bene, to open theſe diſcourſes to the behoofe of the yonger and vnexperimented ſort, I haue therfore emboldened my ſelfe, with your good Honours conſent, and fauour, to dedicate them vnto that Noble yong Lord your ſonne, as a matter (were it handled by a more perfect ſouldier then my

ſelfe) befitting his Lordſhip, as well for the Martial vertues already ſhining in him, as for the ſympathie that his honorable birth and Nobility hath with this ſubiect which we treate of, being warre and Armes. Thus humbly craving your good honours conſent, I beſeech the Almighty for euer to bleſſe you with all honour and felicity.

Your Honours humblie
at commaund,

ROBERT BARRET.



TO THE RIGHT NOBLE YOVNG LORD, VVILLIAM, LORD HARBERT of Cardiffe, ſonne and Heyre apparant to the *right Honorable Earle of Pembroke.*

Robert Barret wiſheth increaſe of all Honour and vertue.

MOſt Noble young Lord, and of honourable expectation, although your yong yeares, haue ſcarſe arriued yet to the bearing of Armes, neuertheleſſe on the aſſured hope conceiued of your honorable parts, as ſo nobly each way deſcended, (whoſe vertue hath alwayes ſhined to the glorie of your name and houſe) I haue emboldened my ſelfe to offer vnto your Lordſhips view and protection, theſe Military diſcourſes, penned vpon occaſion of conference had with ſundry Gentlemen, and by them wiſhed to be publiſhed. Many good reaſons haue moued me to dedicate them vnto your Lordſhip, as well in reſpect of your owne vertues (reſembling altogether that Noble Earle of Pembroke, *your Graundfather, and that worthie Sir* Phillip Sidney *your Vncle) as alſo in reſpect of the great and waightie Commandes which your Right Honourable father doth worthily hold ouer vs, in theſe our Weſterne parts and VVales, vnder our dread Soueraigne. Such as they are, I humbly beſeech your Lordſhip to accept, as from a ſouldier, who humbly offereth himſelfe and his ſeruice vnto your ſelfe, next vnto my good Queene and deare Countrie.*

Your Lordſhips humbly
at command

ROBERT BARRET.

TO ALL MEN OF WARRE IN GENERALL.

HOnourable ſouldiers, and braue men of warre, of what degree ſoeuer, I am aſſured there is none of you that will ſpurne at theſe my paynes taken, as penned, not to inſtruct the experimented and Martiall ſort, ſuch as you are, but the vnexpert and yong Gentlemen, which haue not yet entred commons in *Mars* his Campe. For what good is herein contained, ſhall redound to your glorie and fame in generall: and what faults and errors be herein committed, muſt reſt vpon me, beare them off as I may. Let vs loue one another, that God may loue vs all, and giue vs true Martiall valour to the ſeruice and defence of our dread Soueraigne and deare Countrie.

Yours in all loue,

ROBERT BARRET.

TO ALL GALLANT MINDED GENTLEMEN, and my good countriemen in generall.

GAllant minded young Gentlemen, and good countriemen in generall, which haue not yet marched vnder Mars *his Colours, nor knowne the parts incident to his followers, for your inſtructions haue theſe diſcourſes bene principally penned: the which although they be but rough, & not polished with ſchoole termes, yet happily not ſo barraine, but you may reape ſome good fruit from them, being read, and noted with due regard, to your behoofe (perhaps) in theſe behouefull times. I am not ignorant that ſundry haue treated vpon the like ſubiect, and all to good end: but yet they obſerue not all one method, neither I my ſelf (happily) ſuch as euery one wold wish. It is ſomewhat hard to pleaſe few, but harder to pleaſe many, and none can pleaſe all: although mine intent hath bene (as others no doubt, the like) both to pleaſe and profit the moſt. Theſe approching times do require ſuch vnpleaſant matter, yet the neceſsitie is ſuch: and therefore to be regarded. Accept it friendly, as I haue penned it willingly, ſo ſhall I hold my ſelfe both rewarded and ſatisfied.*

Your well wiſher

ROBERT BARRET.

William Sa. in praiſe of the Author and his worke.

THoſe that in quiet ſtates do ſing of warre,
Or write inſtructions for the Martiall crue,
Muſt neuer thinke t' eſcape the enuious iarre
Of thoſe, who wealth, not honour ſtill purſue.
For they do feare leaſt ſouldiers growing ſtrong,
Commaund the pelfe which they haue gathered long.

Then worthy *Barret*, honourd maiſt thou be,
That dreadleſſe all the teene of baſe conceipts,
Haſt writ a worke, ſhall ſtill eternize thee,
In ſpite of enuie with her ſlie deceipts:
For thou that oft in battell bold haſt ſtood,
Haſt now done that, ſhall do thy countrie good.

For which his paynes let this ſuffice, to ſhew
The loue one ſouldier ought to beare another.
Kindly imbrace his worke, for well you know,
A ſouldiers merits, doth exceede all other:
And ſay with me, as iuſtly ſay you may;
His trauels do deſerue our prayſe for ay.

VVilliam Sa. Gentleman.

THE FIRST BOOKE OF WARRE
DISCOVRSES AND MARTIAL DISCIPLINE.

The first Dialogue:

VVherein is reasoned of the Neglect of Martiall Discipline, and inconueniences thereof: the comparison of VVeapons ancient and moderne, with their different Executions: the imperfections of many training Captaines: the perfect training of men, to great effect: the due sortment of VVeapons now vsed: the contempt of Souldiers, and causes thereof.

Gentleman.

GOod Captaine, I pray, if your leysure will permit, let vs haue your companie some few dayes, familiarlie to discourse with you vpon such matter as time, cause, and occasion shall minister: for since the rumour of this troublesome world towards, I meane, besides the brables of Ireland, the great preparations of the ambitious Spaniard, pretended as is thought against vs, both my selfe, & other country Gentlemen, vnexperimented in such martiall causes, haue not a litle mused thereupon: and so much the more, by reason of the straite charges and commands directed from her Maiestie, and her honourable priuie Counsell vnto vs of euerie Shire, to make good prouision of furniture, and our people to be well trained: the which seemeth not done without some great occasions knowne, or matters greatly suspected: What thinke you of it?

The cause of the beginning of these Discourses.

Captaine. Sir, I will drawe my leisure and poore skill to the vttermost, to satisfie, in what I can, your curteous request. And first, concerning mine opinion touching the ambitious and proud minded Spaniard, I say; that besides her Maiestie and her honourable Counsell, it is not vnknowne vnto a number of honest gentlemen and souldiers of our nation, that the Spaniard hath aboue these thirtie yeares, as well by his owne naturall imperious inclination, as by the Satanicall suggestion of the Romain Pope and Clergie, and continuall instigation of our English and Irish Papists, both desired, pretended and practised the vtter ruine, subuersion and conquest of our religion, state, and realme: the experiment whereof in *Anno* 1588. last, with his Inuincible Nauie, so by him tearmed, attempting our seas and coasts, we haue yet fresh in memorie: whereof wee may well say: *Deus pro nobis pugnabat.*

The Spaniard, as well by his owne imperious inclination, as by the Pope & Clergies suggestion, & instigation of English and Irish Papistes, hath these thirty years imagined Englands subuersion. Example, in Anno 1588.

Gent. But doe you thinke that he will yet attempt the like, considering his foyles, and losses then receiued?

The Spaniard to be suspected for many reasons.

Captaine. Why sir, doe you thinke that so mightie a Prince, so proud and ambitious a Nation, possessing so many mightie kingdomes, such inestimable Indies, such plentie of wealth, such readie subiects, such skilfull warriours, such braue Conductors, such store of shipping, and hauing such an egger on as is the pestiferous Pope, will not yet attempt what he can, were it but to recouer his honour and reputation lost in the last action?

Yet many men hardly to be perswaded.

Gent. Truely Captaine, a number of vs countrie Gentlemen can hardly be so perswaded, and especially our common countrie people.

Captaine. Indeede I doe not greatly maruell thereat, considering our long continued peace vnder our gracious Soueraignes raigne (whom God long maintaine ouer vs) wherein we haue not knowne what the name of warre hath meant, much lesse the effects therof: For long peace hath bred *Securitie*; *Securitie*, *careless mindes*; *careless mindes*, *contempt of warre*; *contempt of warre*, *the dispising of souldiarie and Martiall discipline*; *the dispising of Martiall discipline*, *vnwilling mindes* I feare me: so that it can hardly be beaten into our braines, I meane a number of vs, that we which so long haue found the fruites of peace, should euer feele the effects of warre. To proue that long peace, and neglect of Martiall discipline hath metamorphosed manly mindes, nay whole States and kingdomes; let vs consider the *Macedonians* prowesse, the *Grecians* policie, the *Romaines* valour, the *Carthaginians* stratagems, so long as they maintained Martiall discipline, ruled each the Monarchie in their times: but discipline neglected, diforders grew on, new Martialists sprung vp, and ouerturned their wealth, state, and kingdomes, with a finall ruine of their names and Nations.

Peace breedes securitie; securitie, careless mindes: careless mindes, contempt of war: contempt of war, vnmartial minds. Men hauing liued long in peace, seldome suspect warre. Securitas parit periculum. By neglect of martiall discipln, many kingdomes subuerted.

I speake not this, but for example, to put vs the more in mind to shake off securitie, to mistrust the worst, to make vs more readie and willing to be trayned in Martiall poyntes, not grudging at the charge, but frankely to offer it, to fit vs with furniture, and desirous to be instructed in the knowledge and managing of each armes in their kind; whereby if so proud an enemie should attempt anie thing against vs, we might be readie, with resolute mindes, to beard him to the vttermost. I could say much more, but this may suffice to a willing minde to conceiue.

Examples. Good to shake off securitie, and be carefull for our safetie.

Inueterate opinio not easie to be altered, touching blacke bils and bowes.

Gent. You haue touched many pointes vnder a few termes, but (Captaine) all this and much more will hardly perswade our rurall sort; and I thinke many of vs Gentlemen not farre better minded: for in executing her Maiesties cõmands, for trayning our men, prouiding of armour, I heare many say, what neede so much a do, and great charge in Calliuer, Musket, Pyke and Corselet? our auncestors won many battels with bowes, blacke Billes, and Iackes. But what thinke you of that?

Time altereth the order of warre, with new inuentions daily. The fiery weapons Canon & musket.

Captaine. Sir, then was then, and now is now; the wars are much altered since the fierie weapons first came vp: the Cannon, the Musket, the Caliuer and Pistoll. Although some haue attempted stifly to maintaine the sufficiencie of Bowes, yet daily experience doth and will shew vs the contrarie. And for that their reasons haue bene answered by others, I leaue at this instant to speake thereof.

Gent. Why, do you not like of our old archerie of England?

Capt. I

Capt. I do not altogether diſalow them; true it is, they may ſerue to ſome ſorts of ſeruice, but to no ſuch effect as any of the fierie weapons.

The reputation of Archerie much blemiſhed, ſince the invention of fierie weapons.

Gent. Will not a thouſand bowes handled by good bowmen, do as good ſeruice, as a thouſand hargubuze or muskets, eſpecially amongſt horſemen?

Capt. No, were there ſuch bowmen as were in the old time, yet could there be no compariſon.

Gent. Your reaſons.

Capt. Firſt, you muſt confeſſe that one of your beſt Archers can hardly ſhoot any good ſheffe arrow aboue twelue ſcore off, to performe any great executiõ, except vpon a naked mã, or horſe. A good Calliuer charged with good powder and bullet, and diſcharged at point blanck by any reaſonable ſhot, will, at that diſtance, performe a far better execution, yea, to paſſe any armour, except it be of prooffe, & much more neare the marke thẽ your Archer ſhal: And the ſaid Calliuer at randon will reach & performe twentie, or foure and twentie ſcore off, whereunto you haue few archers will come neare. And if you reply, that a good archer will ſhoot many ſhots to one; Truly no, your archer ſhall hardly get one in fiue of a ready ſhot, nay happely ſcarce one; beſides, conſidering the execution of the one and the other, there is great oddes, and no compariſon at all.

Bowes farre inferiour vnto Calliuer or Musket.

The readineſſe of the one and the other: with their different executions.

Gent. But our bowmen may ſhoot by vollies, as thicke as hayle in the ayre.

Capt. They may ſhoot thicke, but to ſmall performance, except (as I ſaid) vpon naked men or horſe. But ſhould there be led but eight hundred perfect hargubuziers, or ſixe hundred good musketiers againſt your thouſand bowmen, I thinke your bowmen would be forced to forſake their ground, all premiſſes conſidered: and moreouer a vollie of musket or hargubuze goeth with more terrour, fury, and execution, then doth your vollie of arrowes. And againe, againſt a reſolute troupe of horſe, either Piſtoletiers, Hargulatiers or Lanciers, they will ſtãd leſſe time (except they be well frõted with hedge, ditch or trẽch; or ſeconded with a ſtrong ſtãd of pikes,) then either Hargubuze or Musket, conſidering the execution of the one & the other. And what ſouldier is he, that commeth againſt a weapon wherein there is little hazard of life, which will not more reſolutely charge, then againſt a weapon, whoſe execution he knoweth to be preſent death? Many more reaſons might be alledged for the ſufficiencie of the one, and the inſufficiencie of the other, but others haue anſwered the ſame already, beſides the proofe which dayly experience bringeth: and thus you heare mine opinion of your Bowes; deſiring you (Gentlemen and others) not to conceiue ſiniſterly of me for this mine opinion, as not held of me for any diſlike I haue of our old Archery of England: but that common experience hath made it moſt manifeſt in theſe our later warres: well wiſhing in my hart (had it bene Gods good will) that this infernall fierie engine had neuer bin found out. Then might we boldly haue compared (as our aunceſtors did) with the proudeſt Archers in the world.

Archers may ſhoot in vollie.

The execution of the bow not comparable to the musket.

The weapon not of deadly execution, little to be feared.

Bow men haue moſt vſe in open field, and in ſet battels ſhot are vſed in all ſeruices.

But you muſt note this by the way, that the fierie ſhot, either on horſebacke, or foote, being not in hands of the skilfull, may do vnto themſelues more hurt then good: wherefore the ſame is often to be practiſed, that men may grow perfect and skilfull therein.

The fierie weapõ without practiſe dangerous to the handler.

Gent. Well, to ſtand in argument I will not, for I haue ſeene little triall either

of the one or the other. But what thinke you of our abundance of blacke Billes which we thinke to be the next naturall weapon for the Engliſhman?

Capt. True it is, that in time paſt our nation hath performed round ſlaughter-worke therewith: but the warres and weapons are now altered from them dayes, and we muſt accommodate our ſelues to the now vſed weapons, order, and time, to anſwere our enimies with the ſemblable, elſe happely ſhall we finde our ſelues ſhort of our reckening, with our all-too late repentance. But might I haue, in ſtead of theſe blacke Bills and Iacks, ſo many good armed Pikes, I meane good Corſlelts furniſht, I would thinke my ſelfe farre better either to offend or defend.

To accommodate our ſelues to the now vſed weapons, order, and time.

Gent. Why, would you not allow ſhort weapon in the field?

Not many ſhort weapon in the field.

When to be vſed.

Capt. Truly no, not many, yet would I not exclude them all. For I know them neceſſarie for many peeces of ſeruice; as to performe executiõ if the enemie break, or flie; to mingle with ſhot to back them if neede be; to paſſe with Conuoyes, & to ſtand by your Artillerie; to creepe along trenches, and enter into mynes, where the Pike would be ouer long; but beſt for the myne or breach is the Target of proofe, ſhort ſword, and Piſtoll: but for the plaine field, neither blacke bill, Halbard, nor Partizan comparable to the Pike.

Target of Proof.

Pikes, moſt honorable weapon in the field.

Gent. In a ſet battaile would you not haue Bills or Halbards for the guard of your Colours?

Capt. As few as might be; for in their ſteds farre better were ſo many armed Pikes, in mine opinion, conſidering that in ſet Battailes when men come to the ſhock, or puſh of the Pike, they ſtarrie cloſe together, and the firſt three, fiue, or ſeuen rankes do beare the chiefe brunt; and entred ſo farre, men buckle Pell-Mell, cloſe together, by which time commonlie the one ſide reculeth or ſwayeth, and a battell once reculing doth not lightlie hold long, ſo that ere the Center of the Battaill be touched one ſide muſt fall to diſaray; men once diſordered, they commonly fall to rout, the rout is purſued with ſlaughter and ruine. Againſt horſe the like reaſons are to be made: thus either to offend or defend, farre better is the Pike, then either Bill, or Halbard. And to conclude, the ſtrength of the Battaile is the armed Pike, ſo they be equally ſorted with Harquebuze and Musket.

Short weapon about the Enſigne not ſo available as the Pike. The Reaſons.

The armed Pike, the ſtrẽgth of the battaile.

Gent. What meane you by equally ſorted?

Capt. I meane as much to offend, as to defend: To offend I would wiſh to euery hundred men 25 Muskets, & 25 Calliuers at the leaſt, 40 armed Piks, 7 or 8 Halbards, and 2 or 3 Targets of proofe to defend, and ſo of all other numbers.

The equall ſortment of weapons, offenſiue and defenſiue.

Gent. Your proportion I like well, but our countrey people are loth to be at the charges of ſo many coſtly weapons, although her Maieſtie and her honorable priuie Counſell, haue giuen orders and directions for the ſame.

Countrey people loth to bee at charge.

Capt. I perceiue it to be ſo, whereat I grieue not a litle, conſidering, how dangerous is the time; how malicious, ſtrong, & politike is the enimie; how careleſſe, yea ſenſleſſe are we; and how vnwilling to our owne weale? But ſhould theſe your ſecure men once heare the Alarme of the enemie, (from the which God defend vs,) then ſhould you ſoone ſee them alter their copies, chaunge their colours, forget their great bragges of blacke Bills and Bowes, and ſtand at their wittes ende what courſe to take; and ſhould they yet recall their courage, and plucke vp their ſpirites, and dare to looke the enimie in the face, what guides (I pray) haue they? It is not enough to ſay *downe with them, downe with them*,

Our daungerous time to be regarded.

Men liuing long in ſecuritie, amazed in alteration.

Want of good guides.

Lay

Lay on Billes and Bowes: they ſhould encounter ſtrong ſquares of armed Pikes, gallant ſquadrons of Muskets, braue troupes of ſhot, conducted by skilfull Leaders: then ſhould they ſoone ſee the difference of weapons; the danger of the one, the litle doubt of the other, with repentance (perhaps) for not taking them to other weapons in time. Thus much I ſpeak to our inueterate conceiters of bowes and blacke billes.

Actions not effected with words, but with conduction, order men with ſuitable weapons.

Gent. But we haue trayned companies, and ſelected bandes, to anſwere our enemies with like weapons.

Selected bandes.

Capt. True it is, there haue beene good orders ſet downe for the ſame, and no doubt, well performed in many partes of our countrie: but I my ſelfe haue ſeene many ſimple Leaders, ſimple in deede to traine, much leſſe to bring men to fight: for *where the blind leades the blind, both fall into the ditch.*

Companies well trayned to great & good purpoſe. The daunger of ignorant leaders and trayners.

Gent. You meane this by our countrie Gentlemen and Citizens, who haue the trayning of their ſhires and townes, and neuer came in warres, but her Maieſtie and Councell haue ſo appointed it for many good reſpects.

Capt. I know it very well, for many good reſpects, but I am well aſſured that her Maieſtie would well like of ſuch countrie or citizen Captaines, as would be carefull to prouide themſelues of good Officers; ſuch as haue ſeene warres, and borne office in the ſame, I meane honeſt and valiant men, not tapſterly praters, and ale-bench braggers, who know no point of ſouldierie in the world. And if your Captaines were each furniſhed with one or two ſuch good officers, I meane honeſt men, and of experience, no doubt, but they might then doe farre better then they now doe; and by ſuch they might learne many good pointes of ſeruice, to their good, and their companies good inſtructions; yet not ſo much as thereby to become ſufficient Captaines.

Trayning Captaines very skilfull, ought to prouide good officers.

Gent. Our Captaines haue Bookes of Warre, whereby they may learne more in one daies reading, then you haue in a whole yeares ſeruice; and then no great neede of ſuch, which were but charge to ſmall purpoſe.

Bookes of warre.

Captaine. Truely good Sir, pardon me, you ſpeake according to your skill; Now to aunſwere you, I ſay: Such bookes haue beene written by men of ſundrie humours, ſundrie qualities, and ſundrie profeſſions. As ſome haue beene penned by learned men, as *Politicians*, *Geometricians*, and *Mathematicians*, which neuer ſaw any warres; Some by men of ſmall learning, but by their practiſe and long continuance in warres; Some againe haue beene penned by men both of good learning and long experience in warres: the laſt of theſe are to bee beſt approued, as all men of iudgement muſt confeſſe. Now, the vnſouldier-learned, to the vnlettered ſouldier may be paralleld or comparaiſoned, as the Phiſition Theorike to the groſſe practitioner, and vnto the learned ſouldier, as the Theorike onely vnto the Theorike and Practike ioyntly in a perfect Phiſition. And this is my opinion of the diuerſitie of warre-writers, of all which I ſuppoſe the laſt to be chiefely followed. Well, now to your reading Captaines: many of them that reade, do neither vnderſtand the Methode nor meaning of the writer; many do vnderſtand the Methode, and not the meaning; and ſome againe (as men of quicker conceipt, moſt fit for warres) do vnderſtand both Methode & meaning: yet by want of experience & practiſe, they are farre from a perfect ſouldier, and more from a worthie Captaine. The proofe of this is ſoone ſeene, for of

Three ſorts of warre-writers.
1
2
3
The laſt beſt approued. Compariſons.

Reading Captains three ſorts.
1
2
3
The laſt wanting experience, farre from a worthy Captaine.

Example of the first sort.

your first sort, bring one of them into the field with a hundred men, he will neuer ranke them aright without helpe; and (God knoweth) with what puzzeling and toyle: there is the end of his seruice, yea and thinkes he hath done well too.

Example of the second sort.

Now let one of your second sort come into the field with the like number, he will ranke them three and three, but at euery third ranke he must call to his boy, *hola sirra, where is my Booke?* and hauing all ranked them, then marcheth he on faire, and farre wyde from a souldiers march: then commeth he to cast them into a ring, about, about, about, till he hath inclosed himselfe in the Center; now there is he puzzelled, *hola maister stand still vntill I haue looked in my Booke*: by this time there is a faire ring broken.

Example of the third sort.

Lastly, let your thirde quicke conceipted man come into the field with his companie, he rankes them by three, fiue, or seuen in a ranke: Pikes, halfe in front, halfe in traines; Colours and browne Billes in the middest; deuides his shot, halfe in vaward, halfe in rereward, and marcheth on in some prettie good sort, casteth his Ring, and happily commeth out againe; but two to one he misseth his counter-ring. Well, this is well, say our Citizens and countrie people. But how farre all these Captaines are wide to shew their souldiers the right vse of each weapon, a man of meane iudgement may perceiue, much lesse to bring them to the face of the enemie without a manifest daunger, or wilfull ouerthrowe: Examples hereof I might recite enow, but I pray God, if euer it come to the proofe, we leaue not too many examples our selues. For there be many points in a souldier, and more in a Captaine, which can not be attayned by reading, but by practise and experience; and that *de Veras*, as the Spaniard sayth, in earnest; and not *de Burla*, in iest. True it is, the trayning of men, is to good and very great purpose, especially were it done in such sufficient sort, and by such sufficient Trayners, as the waightinesse of the cause requireth: wherein each souldier should perfectly learne his march; knowe the seuerall sounds of the Drumme, to keepe his place and array in good order; when to march; when and how to charge; when to retire; when to stand; how to handle the weapon committed vnto him; with a number of other points, most needfull in these times to be throughly knowne vnto your trayned men, yea, and to others also, were it possible.

Dangerous for vnexperimented Captains to bring men to fight.

Many points to be in a souldier, and more in a Captaine, not attained by reading, but by experience, and that de Veras.

Orderly trayning by good Trainers to good purpose.

Points wherein a souldier is to be fully instructed.

Gent. Trulie (Captaine) you deale somewhat roundly with our Citizen and countrie Captaines, scarce worth thanks at their hands.

Capt. Sir, I wold be loth to offend any; but being demãded, I must needs speak the truth, so neare as I can: for according to my opinion and skill, I haue answered your questions: giuing you to vnderstand, that my opinion is not so of all: for I do know many sufficient Gentlemen and Citizens most willing to the seruice, who are highly to be commended for their good care and diligence therein: yet doubtlesse they will be to seeke in many points, if it should come to the proofe. True it is, all men are not of one constitution of body, humours, and spirits: for some men are fit for warres, some for peace, some for the countrie, some for the citie, some for learning, some for manuall crafts, some to gouerne, some to bee gouerned, some able to conduct a Companie, but not a Regiment; some a Regiment, but not a Royall Campe: of which last sort verie few are to be found. To conclude, Naturall inclination doth worke wonderfull effects in all kind of Professions; for some men (being naturally humoured thereunto) do prooue better

Questions & demands do drew out semblable answers.

Carefull & diligent men to be commended.

Men of sundry constitutions fit for sundry purposes.

Naturall instinct doth worke wonderfull effects in all kind of professions.

souldiers

ſouldiours in fiue yeares experience, then ſome others in fifteene: and it is much, yea, it importeth all almoſt, to be often in Action. For a man haunting long the warres, and ſeeing litle execution, is as one that vſeth often the Fence-ſchooles, but neuer taketh weapon in hand. And if anie of my ſpeeches may ſeeme vnto ſome, to exceede the bounds of *Decorum*, I haue bene vrged thereunto by the litle reputation had of Souldiers amongſt vs: for ſurely, ſuch as haue followed the warres are deſpiſed almoſt of euerie man, vntill a verie pinch of need doth come; then haue we faire ſpeeches; good countenances for a litle time; but the action once ended, and the feare paſt, frownes do follow and cold rewards: ſo that the profeſſion of Armes hath amongſt vs, of all others, bene leaſt eſteemed in theſe our later dayes; the reaſon is, we haue had litle need of warres, and conſequently litle vſe, whereby we are growne ignorant in the Arte.

To be often in action breedeth knowledge.
Compariſon.
Litle reputation of Souldiers in our age with vs.
The reaſons.

Gent. Then I perceiue, Experience makes men perfect, but moſt perfecteſt, if with Experience be coupled the naturall inſtinct you ſpeake of: but me thinks, that the bad reputation we haue had of Souldiers in our age, ſpringeth not of the litle vſe we haue had of warres, ſo much, as from the diſorder of ſuch as haue profeſſed the ſame.

Experience coupled with naturall inſtinct, moſt perfect.
The bad reputation of Souldiers ſpringeth much from their owne diſorders.

Capt. I muſt confeſſe there hath bene, and is many times, great diſorders committed by ſome profeſſours and followers of warres; the which, in mine opinion, proceedeth from two cauſes: the one from the bad choiſe of ſome Captaines, Souldiers and Officers, made at the firſt, by thoſe who had commiſſion or authoritie for the ſame: next, by reaſon of the litle diſcipline vſed amongſt thoſe ſo choſen; for many haue bin choſen by fauor, friendſhip, or affectiō, litle reſpecting their experience, vertues, or vices; whereby moſt commonly, the fawning flatterer, the audacious prater, the ſubtill make-ſhift, is preferred before the ſilent man, the approoued perſon, or the plaine dealing fellow. Then ſuch being choſen and preferred, how do you thinke the conduction ſhold be good? Againe, the Companies that are commonlie leuied, are drawne forth by the Iuſtices of peace, who to disburden their towne or ſhire of corrupt weeds, as they tearme it, do picke out the ſcumme of their countrie, thinking ſuch men ſufficient for the warres: what wrong thereby is done to the ſeruice, the iſſues of manie actions do often times manifeſt. Now, ſuch choiſe made both of ſouldiers and Captaines, what good can be expected from them? For litle amendment groweth where lewd Libertie beareth ſway: for warres diſorderlie vſed, is the *Chaos* of confuſion; and warres well conducted and diſciplined, is the Harmonie of Iuſtice.

The diſorders of men of warre proceeding from two cauſes.
1. The bad election.
2. The litle diſcipline.
Fauorite election.
Faults committed by the Iuſtices of peace in leuying of Souldiers.
Litle amendment groweth where lewd liberty beareth ſway.

Gent. I pray (good Captaine) ſith you haue thus farre waded into the matter, let vs intreat you to ſhew vs the parts of a Souldier, the vſe of his weapon, and the order of your moderne warre.

Capt. Theſe three matters handled would aske a great volume, farre aboue my reach: neuertheleſſe, to ſatisfie in part your curteous demaund, I will do my beſt. Then thus I beginne to reaſon: Firſt, Warres are of two ſorts, either offenſiue, or defenſiue; maintained and perfourmed with men, armour and money; managed with Policie, Order and Stratagems; conducted and perfected by a ſingular Generall, braue Commanders, and reſolute Souldiers. To begin therefore from the loweſt degree vnto the higheſt, I will declare vnto you what parts I could wiſh in euerie degree, and what order in the ſame, following herein for the

All warres are either offenſiue or defenſiue.
Maintained, managed and conducted by money, men and armes, by policie, order, and by good Chiefs.

the moſt part, the *Italian* and *Spaniard*, by whom the beſt diſcipline of warre in our dayes hath bene vſed, and ſupplying where they are defectiue.

Gent. What Nation, thinke you, do prooue beſt Souldiers? for we are of opinion, that there is no Souldier to the Engliſhman.

The Engliſh for valour and courage comparable to anie.

Capt. Trulie, for ſtrength, valour, and courage, I ſuppoſe vs comparable to any nation whatſoeuer: but ſurely for ſubtill policie and martiall diſcipline, eſpecially in this our latter age, ſome other nations do exceed vs. And it is the nature of euerie nation to eſteeme and thinke beſt of themſelues: but *Vegetius* holdeth opinion, the man borne vnder the temperate Zone and climate, to be fitteſt for warres: For (ſaith he) the Souldier of the Septentrionall or North Climate, by reaſon of his wide diſtance from the Sunne, doth abound in hot bloud, and is of good courage, and great ſtrength: entring into battell without feare, but raſh and inconſiderate in the ſame: voyd of conſideration and counſell in moſt of his actions. And on the contrarie, the Meridionall man, by reaſon of the neereneſſe of the Sunne, the which they haue almoſt for their Zenith, are fearefull and faint-hearted, and verie loth to enter into battell, except conſtrained and vrged thereunto; but withall, verie ſubtill, warie and ſharpe-witted: therefore (ſaith he) Men of the middle Climate, participating of both the extreames, are beſt for the warres; as men hardie, quicke, of great direction and counſell, well proportioned, and of reaſonable good diſpoſition and health. But I ſuppoſe, that of either nation by militarie diſcipline and practiſe, may prooue good and excellent Warriours.

It is the nature of euerie nation to thinke beſt of themſelues.

Vegetius opiniõs & reaſons, what climate breeds the beſt ſouldiers.

Men born vnder any climate may prooue good ſouldiers by experiẽce and diſcipline.

Gent. But yet, me thinks, that men of great ſtature are of greateſt ſtrength, and ſo moſt terrible to the enemie, and fitteſt for the warres.

Cap. True, in the firſt ranks tall men do make a faire ſhew, but now the artillerie and fierie weapon hath greatly diminiſhed their authoritie: yet before this infernall engine was vſed in the world, the opinions of the moſt famous Captaines were different herein: for *Alexander* eſteemed men of litle ſtature, for moſt valiant and hardie: *Pyrrhus*, *per contra*, liked the goodlie, tall and large proportioned men: but *Iulius Cæſar*, as more conſiderate and wiſe, rather choſe men of meane ſtature, as naturallie ſtrong, of determinate minds and courage, and capable of counſell and prudence. But we muſt be ſerued with our owne nation, out of the which ought to be choſen the moſt diſcreet, godlie, and vertuous Captains, and Officers of moſt experience, annexed with vertue, and Souldiers of honeſt behauiour and conditions, which (by skilfull Captaines) may ſoone be brought to be readie men.

Sundry opinions what ſtatured mẽ be moſt fit for warre.

The meane beſt allowed.

To bee ſerued with our owne nation is beſt for vs.

THE SECOND DIALOGVE; WHEREIN IS declared the generall parts, wished to be in a Souldier.

Gentleman.

The parts of a Souldier in general, his valorous determination grounded.

1. Vpon defence of true religion.

2. For the honour of his Prince.

3. For the ſafetie of his countrey.

WEll now, I pray you declare the generall parts of a Souldier.

Capt. It is neceſſarie that he which entreth into this action, that hee ground his valorous determination vpon foure principles. Firſt, vpon defence of true Religion: ſecondly, the honour of his Prince: thirdly, the ſafetie of his countrie: fourthly, diligently to learne

learne the Art he profeſſeth, which is warre, whereby many men of low degree and baſe linage haue attained vnto great dignitie, credit, and fame: as *Caius Marius*, borne of poore parents in a village of the *Arpines*, came to be a famous commander of the Romanes: *Valentinian*, a poore mans ſonne of *Sybaly* in *Hungaria*, a Romane Emperour: *Maximinus*, borne in a baſe towne of *Thracia*, vnto the like dignitie: and *Nicholas Pichinnino*, the ſonne of a Butcher, to be Captaine generall of *Phil ip Vicount* Duke of *Millans* army, and other Potentats of *Italy*. Many others might be remembred, both Engliſh, French, Italian, and Spaniſh, borne of low degree, which by their value, vertue, prudence, and conduction, mounted to ſuch high Types of honour.

4 To learne diligently the Arte he profeſſeth, which is warre. Many men of baſe birth by valour and vertue attained high degree. Maximinus.

Now he that taketh this reſolution, ought to be diligent, carefull, vigilant, and obedient, and aboue all, to haue the feare of God. To chuſe to his Camaradas and companions men well acquainted, and of honeſt conditions; no factioners nor mutiners, whoſe company is more dangerous then the diuell himſelfe. With his Camaradas, hee is to demeane himſelfe, ſober, quiet, and friendly: rather ſeuere then lauiſh in ſpeeches: for licentious talkers do eaſily looſe their friendes, their eſtimation and owne quietneſſe.

He ought to be diligent, careful, vigilant, and obedient: and aboue all to feare God. To chuſe honeſt Camaradas.

Let him bee mindfull to ſerue God; for although all profeſſions are thereto bound, yet none more deeply then the valiant ſouldier, whoſe actions are euery houre in danger of death: and without doubt, he that ſo doth, fighteth with more bold reſolution and courage, and is thereby brought through manifold daungers, and vnto vnexpectable euents.

Let him bee no blaſphemer, nor ſwearer: for beſides that ſuch a one is infamous to the world, he is aſſured to be puniſhed by Gods diuine iuſtice, whereof many examples haue bene ſeene.

No blaſphemer.

Let him abſtaine frō dice, cards, & idle games; for common gamſters, although they haue many other good parts in them, yet are they not eſteemed according to their better parts, but rather diſcredited, getting enemies, queſtions, and brawles, with many other inconueniences that followes.

No idle gamſters.

Let him not be ouer curious in his fare and diet, but content himſelfe with ſuch prouiſions as be prouided in the campe.

Not curious in fare.

In any wiſe let him eſchue the beaſtly vice of drunkenneſſe; for crammed panches and drunken nowls are apt to nothing but to be ſluggiſh, ſlothfull, and drowſie, and in their drunken pangs to haue their throates cut. Examples whereof there are too many extant; as of *Tomyris* Queene of the *Scythians*, who ouerthrew *Cirus*, with his three hundred thouſand *Perſians*, in their beaſtly drunkenneſſe; & of *Spargapiſes* the ſaid *Tomyris* ſon, who being firſt entrapped & foundred with the like vice of drunkenneſſe, was firſt by the ſame *Cyrus* defeated and taken; with many moe ſuch examples. Beſides, the ſouldier giuen to this vice of gluttony and drunkenneſſe, doth diſturbe all townes, villages, and all lodgements whereſoeuer he commeth with his vnruly hurly burly and robberies, neuer contenting himſelf with the ability of his poore hoſt; whereby great ſcandales do ariſe, cauſing many times many Townes, Cities and whole prouinces to reuolt from their Princes, cauſed by the diſorder of ſuch inſatiable drunkards and gluttons. The which inſolencies are carefully to be preuented, & ſeuerely puniſhed; as did *Iulius Ceſar* at the ſiege of *Placentia* in *Lombardie*, *Dezimare* or tenth the ninth *Legion* by lound

To eſchue drunkenneſſe. Gluttons & drunkard s breede many diſorders. Examples of puniſhment. Decimare.

of the horne (an ignominious chaſtiſement) for ſpoyling, & robbing certaine villages of his friendes. And the Emperour *Aurelius* did ſeuerely puniſh ſuch ſouldiers as did take any thing from their hoſte perforce: with much more ſeuerity did *Anſidius Caſſius* reforme the robberies & ſpoiles done by his diſordered cõpanies. And *Peſcennius Niger* did condemne vnto death, a whole Camarada of Soldiers, for taking a cocke from their hoſte where they lodged, perforce: And great *Tamberlan* puniſhed ſo ſeuerely one of his ſouldiers for ſuch like offence, that the rigor thereof did ſo correct and diſcipline his campe, that where his army lodged three dayes together in one place, a tree ful laden with fruit, would at their departure remaine whole, and vntouched. On the contrary, the vertue of abſtinence and temperance hath bene ſuch, and ſo great in ſome, as it hath reſted a perpetuall fame, and praiſe to their names; and haue thereby atchiued great and honourable enterprizes.

Anſelme.

Temperance, and Abſtinence.

Chaſte & honeſt.

Moreouer let our ſouldier be chaſte and honeſt in his liuing, refraining ſenſuality with all poſſible inſtancie, auoyding all occaſions which might moue him to that vice: for thoſe that do giue themſelues thereunto, do commonly become cowards in their determinations, with litle felicitie, or good happe in their attempts. For they become laſey, ſickly, and feeble, and chiefly, ſuch as do cary women with them, hauing moſt ordinarily their ends accompanied with diſhonor and ſhame, and their effeminacy many times the hinderance of great actions: As it chanced vnto the imperiall campe, after their famous ſacke of Rome, whereat they loſt their Generall *Burbon*, ſo that the Prince of *Orange*, and other Imperiall Captaines, durſt not meete nor ſtop the paſſage of *Monſieur de Lautrech*, Generall of the French army, which marched towards *Naples*, to regaine that kingdome, by reaſon that they ſawe their ſouldiers ſo eſtranged from their former valour, as men corrupt and effeminate with the vices of the city: & as it fell out with *Hannibals* army at *Capua*; which in ſhort time, of valiant, became vile: of bolde and venturous, cowards and daſtards: of carefull and vigilant, ſluggards, ſlow and careleſſe: whereby *Marcus Marcellus* made it knowne vnto the world, that *Hannibal* might bee conquered. The which vice ought with all rigour to bee chaſtened.

Excesse of lechery breeds cowards minds and diſeaſed bodies. Examples.

Decent in apparel. Ouercurious in attire is ſigne of a Carpet knight, a humour vnfit for warre.

He ought to be very moderate, and not ouer gariſh in his apparell and garments: for it is a principle, found true by experience, that he that is curious in his gate and attire, is neuer like to proue a perfect ſouldier; for they require different humours, to the deepe skill in warre, and the daintie curioſitie of Carpet knights. Examples of gariſh campes, eaſily defeated, many might be produced, but time permitteth me not: but the beauty and brauery of a ſouldier is his bright and glittring armour, not gaudy attire, and peacockes plumes.

Yet places and times vnmeete to be reſpected.

I do not thereby inferre, that a ſouldier comming to his Princes court, or in other places abſent from the warres, ſhould not go more gallantly attired, according to the place and quality of his perſon.

Loving and obedient vnto his Captaine.

He ſhall beare a great loue and true affection vnto his Captaine, and obay him, and the other officers of the campe, with great reſpect: for the very day that hee firſt entreth to be a ſoldier, he doth ſecretly ſweare, and promiſe to ſerue his Prince, by obeying his officers: for the true order of warre is a very reſemblance of true religion, ordained of God, which bindeth the ſouldier to obſerue Iuſtice, Loyaltie,

Conſtancie,

conſtancie, patience, and ſilence, and aboue all, obedience; through the which is easily attained the perfection in armes, and meanes to atchiue great enterpriſes though neuer ſo difficult: as *Plato* ſaith verie well, that loue and obedience is ſigne of a generous minde, not ſubiect vnto paſſions and vnrulie fits: for he that wanteth the vertue of obedience and patience, though otherwiſe neuer ſo valiant a ſouldier, is vnworthy the name. For no greater miſchiefe can befall a campe then diſobedience, nor from whence greater damages do proceede: too many examples thereof do abound. Therefore a good ſouldier ought not go againſt the determinations of his Generall, no nor to paſſe out of the trēches, although it were with intēt to ſhew his valour in ſome ſingular combat, or in any particular challēge, without his Generals licence (for he is not now his own man, but the Princes, who doth giue him pay) remembring the rigorous puniſhment which *Manlius Torquatus* did execute vpon his own ſonne *Titus Manlius*, commaunding his head to be ſtricken off in his own preſence, for hauing paſſed his commaund in ſallying forth to fight with *Genutius Metius* Captaine of the *Tuſculans*, who gaue him the defie & challenge; nothing auailing the poore Gentleman, in hauing ouercome and ſlaine his enemy, nor the whole armies ſupplications, and intreaties. The like rigour vſed *Poſthumius Tiburtus* againſt his ſonne *Aulus Poſthumius*, at his returne from his conquered enemie.

Iuſtice, loyaltie, conſtancie, patience, ſilence and obedience.

Not ſubiect vnto paſſions.

Diſobedience breedeth many miſchiefes.

Not to attempt any thing without his Captaines conſent.

Example of rigorous puniſhment for diſobedience.

Gent. Put if his Prince maketh warres againſt other Chriſtians, as commonly it falleth out, is it no grudge to the ſouldiers conſcience to fight againſt them?

Capt. I ſuppoſe none, for the ſouldier is bound to ſerue his Prince, and to defend his deſſeignes; and it toucheth him not, much to examine whether the warre be iuſt or iniuſt, not being againſt Gods true religion: but in ſuch a caſe, I would wiſh men to be well aduiſed.

The ſouldier is bound to obey his Prince, without examining the cauſe of the war.

Our ſouldier ought patiently to ſuffer the aduerſities and trauels that do fall out in the courſes and chances of warre alſo, ſhewing tokens of true vertue, not to be ouergreedy and haſty for his pay, although he ſtand in great need thereof, but rather with chearefull countenance, ſhew his conſtancy, eſchewing by all meanes poſſible, rebellions and mutinies, which often vpon ſuch caſes do ſucceede, and in no caſe be partaker with mutiners, for alwayes the end of ſuch, is ſharpe and ſhamefull death: examples whereof are rife in euery nation.

Patiētly to ſuffer the aduerſities of warre.

If in encounters and battels where he ſhall happen to be, the enemies happe to be ouercome, let him ſet all his care and diligence in execution of the victory with his weapon, and not in the ſpoile of apparell, robes, and traſh: leaſt he be accounted an vnruly ſcraper, as too many now a dayes be: for many diſorders doe happen by the diſorder of couetous ſpoilers, many times to the diſhonour of the action, and loſſe of their liues.

Careſull execution ere he fall to the ſpoile.

An vnſouldierly part to be ſcraping and ſpoiling.

The like conſideration he ought to haue in the expugnation of any fort, city or towne. He ſhall purſue the victorie euen vntill the enemy be wholie yeelded, and rendred, and licence graunted to fall vnto the ſacke and ſpoile: wherein he ſhall deporte himſelfe neither cruell nor couetous, as a number of bad and graceleſſe fellowes doe, which without reſpect of God or man, do leaue no kinde of rauening crueltie vncommitted, with brutall rauiſhment both of women and maides, and with mercileſſe murdering of poore innocents yeelded: rather in ſuch caſes ſhall he ſhew himſelfe fauourable and mercifull to the humble vanquiſhed, procuring

To purſue the victorie throughly. Not cruell vpon cold bloud.

Fauourable and mercifull to the humble vanquiſhed.

to defend them, and eſpecially ſilly women and maidens: for God, no doubt, will be well pleaſed in ſo doing.

To chuſe the weapon wherein he moſt delighteth.

Let him make choiſe of the armes which he meanes to vſe, and whereunto he findeth himſelfe moſt affected and fit, and to exerciſe all ſorts of weapons; as is vſed in the ſchooles of the *Ianizzaries* Turkes. The pike and corſelet is of moſt eſtimation with footmen, for being a weapon of moſt firmeneſſe in the field, wherwith all ſquares of men are formed, as a moſt ſure defence againſt the fury of horſemen. Of fierie manuall weapons, the muſket is of moſt execution and force; next to them, the calliuers; thoſe to enuiron the pikes, and to be deuided into many ſmall troupes and bands, do ſerue to beſt purpoſe.

The pike and corſlet moſt honorable weapon for the footman.

The muſket of moſt execution of any fiery manuall weapon.

To practiſe all weapons.

Let him practiſe each ſort of weapon, although he profeſſe the Pike, Calliuer or Muſket, and particularly the ſword and target; the which in mine opinion is verie important to many effectes, where men ioyne cloſe together: and moreouer they be very neceſſarie, to view, and reknowledge batteries, to begin aſſaults, to make an entrance, to giue a *Camiſada*, & to many other purpoſes preſented in wars.

The ſword and target important to many effects.

To learne the ſeuerall ſound of the drumme.

Alſo muſt he learne the ſeuerall ſoundes of the Drum, whereby to obey to that which is commaunded (for the Drum is the Commaunders voice,) giuing due attention to vnderſtand the ſame, and carefully to note and marke the ſignes made by the Captaine and officers, without pratling to his next companions; for it is one of the greateſt faults that a ſouldier can commit, and a ſigne of great ligeritie and lightneſſe.

To be skilfull in ſwimming.

It is alſo a great point in a ſouldier to be skilfull in ſwimming: as at imbarkments, diſimbarkments, and paſſing ouer riuers, and ſundry other occaſions incident to warres.

Courragious and reſolute in encounters.

In skirmiſhes and encounters, he ſhould be valiant and reſolute, for the ſouldier that is timerous, can neuer incline his heart to any haughtie enterpriſe, nor a fearefull fainting ſtomacke neither dareth to attend, nor attempt any hote charge, which for viletie and feare, is noted with ſhame and infamie amongſt all warrelike nations.

Vigilant and careſull at ſentinell.

Not to diſarme himſelfe vntill he ſee his enſigne vnarmed in corps de gard.

Hee ſhall bee very careſull to bee alwayes vigilant, and readie, being placed for Sentinell or in the Corps de gard: where hee ſhall not put off his armour vntill his Enſigne-bearer bee firſt vnarmed, on whome he ought to haue his eyes fixed, to imitate, as he ſhould vpon his *Colours* to follow in the field. The faults herein committed, are ſeuerely to be puniſhed: for in Sentinels conſiſteth the ſecurity of the campe. The Romaines puniſhed *Caius Sulpitius* with rigorous death, for his negligence herein, throwing him headlong downe from the high *Capitoll* rocks, what night the *Gaules* attempted the ſurpriſing thereof, which *Marcus Manlius* manfully defended.

Loyall to his Prince.

Hee ſhall keepe vnſpotted his fidelity to his Prince, and although there befall him many *diſguſtos*, and inſufferable toyles, yet ſhall he not paſſe to the enemies campe, for not to be tatched a traytor, a foule and odious offence, rigorouſly to be puniſhed amongſt all nations, from all ages and times; and neuer yet traytor to his Prince made euer any good end, whereof too many examples do abound; *The treaſon may be liked, but the traytor neuer beloued nor truſted.*

No ſhifter from Company to Company.

He ſhall continue and aſſiſt in the company where he firſt began, without ſhifting from company to company: for vſing the contrary, he ſhall be eſteemed a

wauering

wauering companion of ſmall conſideration and conſtancie.

In his eating and drinking hee ſhall not be curious to keepe any preciſe houres, more then the time will permit; yet let him procure to preuent time herein: for a man hungry and ouerwatched, ſhall weakely performe his ſeruice in the field. *Not curious of houres for eating: but to preuent time.*

When he ſhall lie in Campe or garriſon, let him at vacant times occupie himſelfe in warlike exerciſes, wherein vertue excelleth fortune: as in leaping, running, wraſtling, tóſſing the Pike, pitching the Barre, throwing the Sledge, and in the practiſe of all ſortes of weapons, which he ſhall vſe for his recreation: vnto the which exerciſes, I wiſh Captaines ſhould inure their companies, as did King *Pyrrhus* his ſouldiers, rewarding ſuch as excelled herein. *To practiſe warlike exerciſes in vacant time.*

It ſhall be wonderfull auaileable for him to reade Hiſtories, for nothing doth more reuiue the ſpirits, and ſharpen and perfectionate the wits of man. Therein ſhall he finde the erecting, the gouernement, the alteration or fall of Monarchies, Kingdomes, and Common-wealthes: the courſes and changes of times, and ages; the conductions, and ſtratagemes of battels wonne and loſt; the carriage of braue men, and baſeneſſe of bad perſons; the vertue and fame of the valiant, the ſhame and infamie of the vile: the vſe of auncient diſcipline, and manner of our Moderne warres. In fine, there ſhall he behold the ſtate of Peace and Warre. *To delight in reading of hiſtories. The profits proceeding thereof.*

And for as much as no man can reduce thoſe things vnto perfection whereof he is ignorant, and knoweth not the Arte, let him diligently marke, conſider, and remember the orders which the higher Officers doe obſerue, in framing their Squadrons of Infanterie and Cauallerie, and the place of the great Artilerie in the march, field and Campe; and the plot of the alodgement according to the diſpoſition of the ground where the Campe ſhall then be, with the manner of the intrenching, with the placing of the Ordinance, and defences for the ſame. *Carefull to marke the courſes kept by his ſuperiour officers.*

And if he find himſelfe at the ſiege of any ſtrong place, towne or fortreſſe, let him diligently view the ſituation, and the order that is taken for the batterie thereof: and if happily he be within a fort of defence; let him well marke the courſe that is taken for the defending thereof. Thus viewing, conſidering, conceiuing, and obſeruing all theſe aforeſaide points, and manie more vſed in militarie actions, and that which toucheth euery officer in particular, euen from the Caporall to the Captaine generall, to the end he may be throughly perfect in the Arte he profeſſeth; thereby to aduance and vantage himſelfe, ſith it is the verie ſource, mother, and foundation of Nobilitie: reaſon therefore it is, that it be perfectly vnderſtood of the profeſſours and followers thereof, ſeeing that all practiſes of mechanicall Artes do follow the ſame order and courſe to come to the cunning of their craft. *The profeſſion of armes foundation of Nobilitie.*

Gent. Good Captaine, you haue largely diſcourſed vpon the points and parts in generall, which ought to bee in a ſouldier; and mee thinkes ſo many good parts are hardly to be found in one man. *So many good parts hardly to be found in one man.*

Capt. True it is, and very rare in deede: yet euery honorable ſouldier, that reſolueth to follow warres, ought, with all his endeuour, to trie to attaine to all thoſe good partes, according to his capacitie and wit: and although his abilitie *Euery honourable ſouldier ought to endeuour himſelfe to attaine what he can.*

Some better then few, few better then none at all.

be not able to attaine all; yet vnto some: *some better then fewe, fewe better then none at all*; the first to be honoured, the next to be accepted, the third to be reiected.

Many good parts in a souldier, gotten by experience, and perfected with learning.

Thus may you see how many good partes are requisite to a perfect souldier; not learned by heare say, nor gayned with ease: but with care, diligence, industrie, valour, practise and continuance; and most of all perfected with learning, annexed with long exercise and vse.

Gent. Then I see you would haue a souldier to be learned withall, which you seemed to dislike in our booke Captaine at the first.

Most famous Commaunders were learned.

Capt. You mistake me farre, for I euer allow and honour the learned souldier: for what famous Commaunders haue there yet bene, vnlearned and without letters? *Themistocles*, *Alcibiades*, *Alexander*, *Caesar*, *Scipio*, with all the rout of the braue Romane Commaunders, and as many braue men as euer were since, were men learned, and read.

Thus I rest for this time, till a new day to beginne.

The end of the first Booke.

THE

THE SECOND BOOKE OF WARRE
DISCOVRSES AND MARTIAL DISCIPLINE.

The first Dialogue:

Wherein is declared the particular parts of ſundrie Martiall Officers, from the Caporall to the Captaine of Infanterie.

Gentleman.

COurteous Captaine, your yeſterdayes Diſcourſes, haue giuen vs ſuch content, that we are now inflamed to know further herein. Wherefore I beſeech you to proceede with your Martiall matters, deſcribing vnto vs each office in particular, whereunto my ſelfe, and theſe other Gentlemen will giue our diligent attention.

Capt. The orders obſerued by Antiquitie I let paſſe, falling in few tearmes, to our Moderne cuſtomes, wherein you ſhall vnderſtand, that all Campes are framed of Men, Weapons, Munition, and good Chieftaines, wherein there is ſome difference in euery Nation; but the courſe which herein I meane to follow, ſhal be moſt after the Italian & Spaniard, who haue had the chiefe managing of warres in Europe theſe 50. or 60. yeares; and with whom I haue moſt frequented and ſerued.

All Campes formed of men, weapons, munition, and good Chiefes.

A Royall campe therefore, being leuied and gathered, the Prince with his Councell of warre, appointeth a moſt ſufficient Generall, then a Campe-maſter generall, a Captaine generall of the Cauallerie, a Captaine generall of the Artillerie: the Campe is deuided into ſundry Tertios or Regiments; ouer euery regiment a Campe-maiſter or Colonell; the Campe-maiſter deuides his regimēt into companies, ouer euery company a Captaine, alſo euery Regiment hath his Sergeant Maior, and ouer the whole armie a Sergeant Maior Generall.

The Cōmaunders of a campe in degrees.
Armie is deuided into ſundry Regiments.
The Regimēt into ſundry bandes.
The officers of a Regiment.

Touching the number of a ſeuerall Company, ſome thinke 100. ſome 150. ſufficient; but whether it be of 100. 150. 200. 300. or more, or a Regiment of ſuch ſeuerall companies, being fitted with Captaines and Officers of ſufficiencie, it importeth not much: for ſome Captaines can better gouerne 300. then ſome others 150.

The number of a Band.

Now the Captaine, hauing his cōpany appointed which he is to direct, gouern and cōmaund, he chuſeth his Lieutenant, Enſigne, Sergeant, Drumme, Phifes, & *Cabos de ſquadra*, or Caporals, and *Cabos de camera*. Now for ſundry & often occaſions offred in warre, the which muſt be encountred with order, policy & gouernmēt of nūbers, more or leſſe, it is neceſſary to deuide the cōpanies into *Squadras*, as

The Captaine and his officers of a Companie.

well pikes as ſhot, conteyning each Squadron twentie fiue men: and ouer each ſquadron a *Cabo de ſquadra*, with which office I meane to beginne.

The Caporall his election and office.

The parts to be in a Caporall.

Capt. When the Captaine electeth his Caporals, he ought to do it with ſuch conſideration, that amongſt his ſouldiers, one, choſen to this office, none ſhould excell him in valour, vertue, experience, and diligence; yea and in age alſo, to the end he might be reſpected with more loue and reuerence: ſo that he deport him ſelfe among them, as a father with his children, his conditions being a patterne vnto them, aſſwaging and ending their debates and quarrels, reducing them vnto amitie, with louing one another, in ſuch ſort that they may all be of one will, deſire, and ligue.

To be with his ſouldiers, as a father with his children.

To cauſe them to keepe their armes neat and cleane, and to ſhew them the vſe thereof.

Let him learne perfectly euery ſouldiers name, and to know the qualitie & valour of euery one in particular, & be earneſt with them to keepe their armor neat, cleane and bright, and often to practiſe the weapon they carrie, he himſelfe enſigning and teaching the *Biſognios* and rawe men: for, beſides that it concerneth euery one in particular for his owne defence, and thereby the better to know his valour and skill, nothing doth more reioyce and glorifie a Campe, then the glittering ſhew and ſhining of their armour.

The glittering ſhew of armors is the reioycing of a campe.

He ſhal perſwade them to all cleanlineſſe and honeſtie, & diſſwade them from vice.

He ſhall perſwade them to goe neat and cleane in their apparell, but with modeſtie and profite. He ſhall reprehend them for ſwearing and lewd ſpeeches: and ſhall not permit them any prohibited games, the which he muſt doe with ſuch ſagacitie and warie meanes, that they reſult not againſt him, and ſo reiect and contemne his reputation, thereby looſing their loue and his former reſpect, for the puniſhment remaineth not in his hands, nor in any other inferiour Officer, but it appertaineth to the Campe-maiſter or Lord high Marſhall.

To be obedient vnto his ſuperior officers.

Being at any peece of ſeruice with his Squadra alone, his care and authoritie great.

His care at the Corps de guard.

In preſence of his ſuperior Officers, he is to obſerue array, order, & obedience, as the reſt of the ſouldiers doe, but being with his Squadron alone in any skance, trench, Ambuſcado, or abroad at the watch, or to ſuch other effects, he beareth at that time his Captains authoritie: as, being at watch or guard in any open place, he is to enſcance and fortifie as commodity and the place will permit, to reſiſt the attempt of the enemie, being by them charged, ordering and appointing all his companie to ſtand with their weapon readie bent, ſtill, without rumor, and reſolute to defende. And being at watch in the Corps de guard, let him prouide fire, cole, and wood, to make light as well by day as by night, eſpecially, if his Squadron be ſhot, to ſpare the ouer much waſting of match, whereof he muſt ſee they be well prouided, as alſo of powder and bullet, and concerneth to him the diſtribution of the ſame amongſt them.

His care, office, & duty in ward, watch, and Sentinell.

Being appointed to ward or watch, let him prouide to be firſt refreſhed with victuals, and his Camarada alſo: then enter thereunto orderly, from whence neither he, nor any of his Squadron, is to depart vpon paine of life, vntill the Sergeant doe call and commaund him from the ſame.

The care, order, and regard in placing watch and Sentinell.

In placing of the Sentinels, there are ſo many aduertiſements to be giuen, as there are differences of ſituations and places; and therefore it is to be remitted to the diſcretion of the Scout-maiſter (if there be any) or vnto the care of the diligent Sergeant, carefull Caporall, or other ſuch officer, to ſet them in ſuch ſort, and

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with ſuch diſpoſition of the ground and place, and diſtance, that they may before the enemy arriue, giue aduiſemẽt in ſufficient time to the Corps de guard, wherby they may be readie with weapon readie bent. And therefore in ſuch places of ſuſpect and daunger, there ought to be placed ſouldiers of importance and care, and men of beſt credit, ſith it concerneth the ſecuritie of the Campe, which remaineth quiet, repoſed, and at reſt, truſting vnto the care and diligence of theſe Sentinels, vnto the which an order is to be giuen, how to behaue themſelues, in any alarmes preſented, giuing them the Word deliuered by the Sergeant. And if the place be obſcure, and full of couert, he ſhall ſet abroad certaine forlorne Sentinels without the Word, ſingle, and if occaſion require, double; a ſhot and a pyke, to giue knowledge of the alarme. This is ſometimes done with a whiſtle or hyſſe, for not to diſturbe the campe without great neede or good occaſion. His principall care is, to viſite and reuiſite them, as well by day as by night, making his Coutraround with great care and diligence, and to be readie at euerie call and neede.

In places of ſuſpition and danger, to place men of beſt importance.

To viſite and reuiſite often the watch.

He is to repart the victuals, deliuered by the Sergeant for his Squadron, with liberalitie and equalitie vnto euery Camarada, without partialitie to any; and ſhall procure that in their lodgings they accommodate themſelues together as true companions, and loyall friendes; he himſelfe being ſo vnto all, both in deed and word, for the better to keepe them at commaund and obedience, the which doth moſt import to the well effecting of any act, and ſo ſhall he accompliſh what is encharged and commanded him as a prudent Officer.

To repart the victuall with equitie and right.

Gent. Then, is the word to be giuen to euery ſeuerall Sentinell, ſauing to the forlorne Sentinels, as it appeareth by you, or vnto the Caporals onely as I haue heard ſay?

Capt. Amongſt the Spaniſh companies of their old Regiments, where their ſouldiers be experimented, truſtie & carefull, it is ſo vſed; but amongſt new companies, the Caporals onely haue the Word, who are to be readie vpon euery call of the Sentinels, to ſee the occaſion, and to take the Word: the which is ſo done with great conſideration, for many inconueniences and diſorders which rawe *Biſognios* will commit: and therfore thoſe Poſts or Sentinels which had the word, being relieued & changed, are preſently by the Sergeant or Officer, carried vnto the Corps de gard; & not ſuffred to depart thence vntill the watch be diſcharged.

The word not to be truſted vnto raw ſouldiers & biſognios.

Gent. In what order is he to take the word?

Capt. Being a ſhot, he ought to haue his peece readie charged & primed, and to cocke his burning match, and ſo to preſent his peece; and being a pikeman, to tertiar or charge his pike, and no further off then that with ſo low a voice as they may vnderſtand one another, to demaund the Word, as in the Sergeant Maiors office I will more at large declare.

The order how the Sentinell is to receiue the word of ſuch as come neare him.

Now euery Caporall or *Cabo de eſquadra* deuides his Squadra into two equall partes; naming eyther of them a Camarada: contayning each twelue ſouldiers, or any other number, according to the proportion of his Squadra. And ouer euery Camarada, or ſuch number of ſouldiers, is there appointed a *Cabo de Camara*, being the moſt ſufficienteſt ſouldier of the ſaide Camarada. The which *Capos de Camara*, are aſſiſtents vnto the Caporall, for the good direction and gouernement of his Squadron, and are neceſſarie Officers for the ſpeedie em-

Camarada, what.

Capo de Camara.

battelling or changing of proportions of any number of men, as hereafter ſhall be declared.

The Sergeant of a Band, his election and office.

In the Sergeant of a Band there ought to be militarie diſcipline. Skilfull, valiant, quicke.

Capt. In the election of the Sergeant, there is greater cõſideration to be had, for that in him conſiſteth the principall parts of the obſeruation of Military diſcipline. And for that the execution of the ſuperior officers orders and commands, doe concerne his charge and dutie, it importeth much, that he be a skilfull and valiant ſouldier, and well experimented in martiall matters; and (I ſay) of ſo great importance, that more tollerable it were, all the other officers of the companie (yea were it the Captaine himſelfe) to be rawe men and *Biſognios*, with litle experience and skill, and the Sergeant not ſo; who of neceſſitie ought to be an expert ſouldier, and of great ſpirit and diligence.

Requiſite that he be ſomewhat learned and ſeene in Arithmetike, to know how to ſort his weapons, and to frame his ſquadron the ſooner. To draw each ſort of weapon by themſelues.

It is requiſite that he be ſomewhat learned, both to write and reade, and to cypher, whereby to keepe a roll or liſt of all the ſouldiers of his cõpany, with their ſeuerall weapons, and haue them in memory by names of the Camaradas, and to know diſtinctly how many armed Corſlets, and vnarmed pikes, with the ſhort weapons, what number of Shot, Musket and Calliuer; to ſet with diligence at an inſtant all his companie in order, as occaſion ſhall cauſe, and the place require wherein he ſhall be. And to the end that he doe it not confuſedly, let him drawe each ſort of weapons by themſelues, whereby to ſet them in order with more conſideration, diſpatch and eaſe; placing the moſt expert ſouldiers and beſt armed, in the front, rereguard, and flankes, where greateſt occaſion ſhall require. For it toucheth him to ſee that his companie be well ranked, in equall diſtance, and in good array, with their armour and weapon fitted, and vſed in their due nature; the which he muſt doe, with great forecaſt, cheerefull ſpeeches, and courteous wordes, binding them thereby to loue him, to regarde him, to reſpect him; inſtructing the Drummes and Phiſes their ſeuerall ſoundes, as howe to ſound a Call, a Troupe, a March ſwift or ſlowe, an Alarme, a Charge, a Retreit, &c.

The beſt armed in front, flankes, and rereward.

To inſtruct the drumme the ſeuerall ſounds.

The manner to ranke a ſeuerall Band.

Sundry orders are vſed in ranking and placing each ſort of weapon in a ſingle companie, but the beſt obſerued is this; the Muskets firſt and Calliuers in forewarde & rereward equally deuided, the Pykes in like ſort with their armed corſlets in front, rereward, and flankes, contayning in the Center their Enſigne, with their armed Halberds: to be ranked by 3. 5. or 7, as the Sergeant ſhall thinke good. But to enter into skirmiſhes, or to frame any Squadrons, let him obſerue the order appointed by his Sergeant Maior, ſhewing himſelfe diligent and readie therein; in ſo doing he gayneth honour, reputation, and credite: and doing the contrarie, infamie, diſhonour, and ſhame, breeding cauſe of diſorder, and looſing of time.

To deuide the ſquadron for ſeuerall ſeruices.

To appoint them to their ſeuerall ſeruice.

It is his office to order and deuide the Squadrons, aſſigning which ſhall be for the Corps de guard, which for the walles, which for the ſtreetes of the quarter where they are lodged, and which are to accompanie the Colours; and he ſhall not ſuffer any ſouldier to come thither without his Armes fully furniſhed. Hee is alſo to appoint which ſhall goe to the Scout-watch, and thoſe

which

which ſhall worke in the Rāpier & Trenches. If any quarrels or brawles do ariſe amōgſt the company, it is his part to apprehēd the offenders, yet in ſuch ſort, that he diſmeaſure himſelfe with none, but execute the ſame with great moderation.

It is alſo his office to ſet & remoue the watches, conducting them to the place where they are to remain, counſelling the Caporals what they are to do, communicating his opinion in placing the Sentinels: and to giue them the Word with all circumſpection and ſecrecie, as was deliuered to him by the Sergeant Maior.

To ſet & remoue the watches.

To giue the word with all ſecrecy & circumſpectiō

And although it toucheth the Caporals to knowe the prouiſions which the Souldiers haue of powder, ſhot, and match, and other munitions and armes, yet the Superintendencie thereof reſteth in him: for, beſides that it importeth the Princes commodity, the bad diſtribution thereof doth hazard manie times the ſafetie of the whole Armie, comming to faile and want in time of neceſſitie.

To be careful for the ſouldiers proviſion.

When occaſion is offered, he is to fight as well as the reſt, chuſing his place, which ſhall ſeeme him fit to returne to his office, and accompliſh the dutie of a true and perfect Souldier: therefore hee ſhall go alwayes gallantly armed with a faire Millan Corſlet and Burgonet, and his weapon a Halbard or Partizan, but by reaſon of his continuall motion, not ouer heauie: his Halbard borne after him vnto his lodging, thereby to be the better reſpected and knowne.

The proper arming of a Sergēt

If there want victuals to bee ſould in the Campe, it toucheth him to procure from the Armies ſtore, to the end that his Companie fall not into want: the which being procured, he ſhall diſtribute the ſame vnto the Caporals, who are eſpecially to diuide it amongſt the Camaradas. The like he is to do for match, powder, and ſhot, and other conuenient things, that his Companie may bee well ordered, and well prouided.

His care is to prouide and call for victuals for the ſouldiers.

In the abſence of his Captaine he is to vſe the like obedience vnto his Lieutenant, or Enſigne, who remaine in his roome to gouerne the Companie: and particularlie he ought to carie great reſpect vnto the Sergeant Maior, readilie accompliſhing all his orders and commaunds, and verie often to come in his preſence, reknowledging him for his ſuperiour officer, well remembring and marking what he ſhall ordaine and command in all occaſions offered: conſidering the deſſeignes and courſes that are taken, to the end that by ſuch ſemblable inſtructions and examples, and by his good diligence and valour, he may deſerue and aſcend to higher degree and place.

In abſence of the Captaine to be obedient to the Lieutenant.

By diligēce, paine & induſtry to climbe to higher degree.

The Enſigne-bearer or Alferes, his election and office.

In the choiſe of the Enſigne bearer, the Captaine is to haue manie & great conſiderations, for that it is not onlie enough for ſuch a one to be a good Souldier, bolde and valiant, but to be his equall (if it may be) in valour, diſcretion & counſell, becauſe many times, in his, and his Lieutenants abſence, the gouernement of the Companie doth belong to this Officer. And for as much as the Enſigne is the verie foundation of the Companie, and therein conſiſteth the honour, & his, & his ſouldiers reputation, it is neceſſarie, that he vnto whō this office is incommended & committed haue in him the parts of a perfect *Caſtellano*, or Captaine of a caſtle, in nobleneſſe & eſtimatiō of honor, to know how to keepe

The parts required to be in an Enſigne-bearer.

The Enſign is the foundatiō of the company, and in whom conſiſteth the honour and reputatiō of Captaine & ſoldiers.

The Enſigne-bearer to die in defence of his Enſigne.

it, and die in the defence thereof, neuer abandoning the ſame, as many valiant & honourable Enſigne-bearers haue done, to their immortall praiſe and fame.

The Enſigne for the field the ſmaller, for garriſon, then the bigger.

When a Companie is newly leuied and erected, the Captaine cauſeth his Enſigne to be made of what colour it ſeemeth him beſt: and if the ſeruice be for the field, he maketh it ſomewhat leſſe, the lighter and eaſier to be handled; but in Garriſons it is made ſomewhat larger, becauſe it is moſt often camped vpon the wall.

Gent. Why are they called Enſignes, and from whence came that name?

Cap. The ancient *Romanes* reparted the people of their Armies into Legions, Cohorts, Centuries, and Maniples: and to be ſeuerallie knowne, they caried vpon ſpeares or pikes ends, the figures of Eagles, Dragons, and ſuch like; and ſome the pictures of their Emperour, and called the ſame *Signa*: whereupon the *Italian* and *French* calleth them *Inſignes*: but the *Spaniard* nameth them *Vanderas*, from the *Almaine* word *Vanderen*: and we *English men* do call them of late Colours, by reaſon of the variety of colours they be made of; whereby they bee the better noted and knowne to the companie.

Wherfore called Enſignes.
Why called Banners: why called Colours.

Now, the Enſigne made and finiſhed, & faſtened vnto a ſpeare-headed ſtaffe, ſharpe pointed with iron, the Captaine with his own hands deliuereth it vnto his Enſigne-bearer, encharging him the cuſtodie & defence therof, with a ſolemne oth, to be true to his Prince and Captaine; accompanied with manie honourable words, the which he is bound to returne to the Captaine, if the Companie be diſſolued or caſht, before any notable peece of ſeruice perfourmed, either at breach, batterie, encounter, or battell, wherein he hath valiantly fought, and honourably defended the ſame; for from thence forward it is the Alferes due, as deſerued for his manhood & valour: but yet to receiue the ſame from the Captaine as an honourable gift.

The Enſignes deliuered to the Enſigne-bearer by the Captaine with great ſolemnity and oath.
After any ſingular peece of ſeruice, it is the Enſigne bearers due yet by gift of the Captaine.

He ſhall alwaies go gallant & well armed, with a faire Corſlet, Burgonet, ſhort ſword and meane dagger, which are his proper arming, with a faire Halberd, when he beareth not his Colours, borne after him to his lodging, or elſewhere, thereby to be the better reſpected and knowne.

The Enſignebearer to go gallantly armed.

He muſt ſhew himſelfe dreadfull and terrible to the Enemie with his drawne ſword in his right hande, and in his left the Enſigne brauely diſplayed and vaunced.

To shew himſelf terrible to the Enemie.

In caſes where he is obliged and bound to fight, and to follow with the ſouldiers; as when the Enemie ſhall haue broken the Squadron, euen vnto his Front and ranke, or if to run in array, and in the ſcaling & aſſaults of batteries or walles, or in ſuch other conflicts, he muſt puſh and thruſt with the point of his Enſigne: and therefore let him procure to haue to his Camaradas moſt valiant and expert Souldiers: for although that euerie Souldier of the companie be bound to his ſuccour, defence and aide, for their common honour, yet thoſe that are moſt obliged, will moſt aduenture themſelues therein; as well appeared at the aſſault of the citie of *Aphrica* in *Barbarie*, in *Charles* the fift his time, when *Iohn de Vega* Viceroy of *Sicilia*, and the Lord *Garcia de Toledo* gained it: where the Enſigne-bearer of Captaine *Moreruela* (being his brother) being ouerthrowne and ſore wounded, was by the Sergeant, (who was alſo brother vnto them) ſeconded and ſuccoured, cauſing him to retire, himſelfe remaining with the Enſigne; and

The times and caſes when the Enſigne-bearer is to fight.

Examples.

paſſing

passing forwatd with the same, like a valiant souldier, was slaine; the Captaine seeing him fall, tooke vp the Ensigne, perfourming the Ensigne-bearers office & dutie, vntill the place was entred: wherein he was so sore hurt and wounded, that few dayes after he died thereof, and his Alferes also: so three braue brethren valiantly died in the defence of one Ensigne. Some such examples haue we had amongst the braue souldiers of our Nation to their renowne and fame.

Gent. If in fight the Ensigne be broken, and the Enemie do carie away a part thereof, doth the Ensigne-bearer lose thereby his reputation?

The Ensigne broken or torne in fight, no dishonor to the Ensigne bearer, if he retaine the truncke in his hand.

Capt. No, not a iot: so that hee keepeth the verie trunke of the staffe in his hand.

When the Companie doth march, the Ensigne-bearer may carie his Colours resting vpon his shoulder, eyther open or folded vp: but making a stand or *Alto*, he is bound by dutie to aduance the Ensigne, and not to campear it, or pitch it on the ground: for that is the tricke of a *Bisognio*, and doth repugne the authoritie and grauitie of his office.

In march how he is to behaue himselfe.

In fights, in encounters, in musters, and in presence of the Lord Generall, he must cary his Colours displayed, & passing by him he must aduance it, only bowing the point somewhat downward without any more ceremonies: but if he passe by the king or Prince, he shall withall bow somewhat one of his knees, as a difference from the Generall.

In fights, in encounters, in musters, and in his Generals presence how he is to behaue himselfe.

In presence of the Prince, how.

In Ordinances, or framed battels, alwayes the Ensignes do march in one large or long ranke iointly, in the middest of the Squadron, the most place of honour is the left and right out-sides, the Ensigne on the right hand carying the preheminence, who giueth direction and order to the rest in this sort: if hee beareth his Ensigne on his shoulder loose, so are all the rest to carie theirs; and if fardled vp, all they are to do in the like order: and so imitating him in all other maners and shewes: and if he deliuereth his vnto his *Abanderado*, and take the Halberd, the rest are to do the like: and the selfe same orders are to be obserued by the *Abanderados*: for it is an vnseemly shew to see in a ranke of Ensignes, different orders one from another.

The Ensignes place in a squadron or battell, the right hand is the place of preheminence.

The Abanderados.

The *Abanderados* are vsed to be souldiers, and some do set their owne seruants to that office. These ought to go well apparelled and well armed: for I haue seene sometimes amongst the *Spaniards*, the Alferes themselues to passe into other ranks to fight, leauing the Ensigne with the *Abanderado*: but I like it not; for it is not lawfull for the Ensigne-bearer to leaue his Colours, neither to fight but with the same in his hand, and that vpon such occasions, as before I haue declared; no, though it were to shew his valour and prowesse.

Not lawfull for the Ensigne-bearer to enter into fight, but with the Ensigne in his hand.

In the lodging the Ensigne shold be accompanied with a Corps de garde, although it be in place of quiet, and out of all suspition, as well for the authoritie and reputation of the same, as to auoyd manie inconueniences which happen to succeed through mutinies, brawles and frayes. It is also conuenient that the Ensigne-bearer haue alwayes with him a Drum, to call his companie together, and for such occasions as shall be offered: for the Ensignes should be of such veneration, and haue bene so respected of the Souldiers, that there hath seldome bene seene any one flying to the sanctuarie thereof (auoyding the Souldiers furie) to bee pursued or hurt, esteeming their Ensigne a thing inuiolable: as it fell out in

The Ensigne to be accompanied with a Corps de-garde in his lodging.

The veneration and respect of the Ensigne.

Breſcia, when the mutinous ſouldiers wold haue ſlain the Lord *Lewes Yearts*, their Generall, who flying to the Enſigne, it was enough to cauſe them to leaue off ſo ſhamefull and ſo abhominable attempt.

The ſouldiers not to diſarme themſelues vntill the Enſigne-bearer be firſt vnarmed and Enſigne placed vp.

When the Souldiers do enter into any Corps de gard, either in Caſtle, towne, fortreſſe, or campe, they ought not to diſarme themſelues vntil they ſee their Alferes firſt vnarmed, vpon whom they ſhould haue their eyes fixed, to imitate, as they haue vpon the Enſigne he beareth to follow: wherefore the Enſigne-bearer is not to diſarme vntil the gates of the Fort or place of defence wherein they are, be firſt ſhut; & if it be in campe or field, when it ſeemeth that he may ſafely do it, & not otherwiſe: to the end that the ſouldiers take not example from him of vnſoldiarie negligence and ſlouth, but rather of all vigilancy, care and paine.

When the Enſign-bearer is to diſarme.

Gent. You haue largely ſet downe the aduertiſements touching this Officer, wherein you haue notified many martiall points, vnknowne to vs: therfore I pray proceed to the Lieutenants office and dutie.

Capt. This Officer amongſt the *Spaniſh* companies is not vſed: but amongſt vs, the *Italians* & *French*, therfore I will touch ſomewhat of him by the way.

The Lieutenant his office and duty.

The parts that ought to be in a Lieutenant.

He therefore that is choſen to this office, ought to be a man of great experience, fidelity and valour, who in the abſence of his Captaine, carieth his roome, charge and command; vnto whom the ſouldiers and vnder-officers are to obey, for the time, as vnto the Captaine himſelfe: notwithſtanding he muſt vſe it with ſuch diſcretion and moderation, that he arrogate not too much vnto himſelfe; but at his Captaines returne he ſhall with all loue, truth, and dutie, enforme him of all things and matters paſſed.

Not to arrogate ouer much authoritie to himſelfe.

To pacifie and determine the ſouldiers brables with grauity and good ſpeeches.

If any queſtions and ciuill debates do ariſe amongſt the ſouldiers of his band, he is to pacifie, iudge and determine the ſame with grauity and good ſpeeches: whereby he ſhall binde them more ffrmely vnto him in obedience and loue: and when as he cannot concert and agree them, he is to referre them ouer vnto his Captaine; but the moſt faultie and offenders hee may cauſe to be apprehended, and ſend them to the Colonell or Marſhall.

To cauſe offenders to bee apprehended.

To ſee the company furniſhed with all neceſſaries.

It is his charge and office to ſee that the Company be prouided of all neceſſaries, aduertiſing the Caporals to ſee well to their charges, and aduiſing the Sergeant to be diligent, carefull, and ready in his office, wherein he ſhall ayd, help & aſſiſt him, both in ordering the company, and in ſetting the watch, the which he is preciſely bound to perform himſelf, in the Sergeāts abſence or time of infirmity.

To counſell, ayde & aſſiſt the Sergeant in his office

To paſſe with the company to the Corps de gard.

He is to paſſe with the Companie vnto the Corps de garde, to ſee the watch and Sentinels ſet, and often times to viſite and reuiſite the ſame; and to perſwade the ſouldiers to reſpect, with obedience, their Sergeant and Caporals: wherefore it importeth him to be well ſpoken, diſcreet and wiſe, to moue & perſwade them with ſound reaſons, to the obſeruation and obedience of Militarie diſcipline, diſburdening thereby his Captaine of manie and ſundrie toiles.

To viſite and reuiſite the watch.

To ſee the ſouldiers appointed to their lodgings.

It toucheth him alſo to ſee the ſouldiers appointed to their lodgings, giuing order for the ſame vnto the Harbenger, and how he ſhall diſtribute the baggage and cariage amongſt the particular ſouldiers, and the ſicke men carefullie to bee looked vnto, not ſuffering theſe Harbengers or Furriers to rob, purloine, and

filch

filch as they are wont to do,whereby great ſcandals do ariſe,as at the riſing of the Vliſhingers,and in ſundrie other places hath appeared.

His place of march (his Captaine being preſent) is in the Rere-ward of all the company,but after any fight or skirmiſh,in retiring & marching out of the field, he is to paſſe before, and the Captaine in the rere-ward. Now, for as much as by that,as ſhall be declared in the ordinarie Captaines office, may eaſily bee vnderſtood the dutie of this officer, hauing the whole company in charge, it ſeemeth me to haue ſaid at this preſent,ſufficient herein. *His place of march.*

The Captaine of Infanterie, his election and office.

Firſt, at the leuying and erecting of new Companies, in *Spaine*,the Captaines of Infanterie are appointed by the Counſell of ſtate & warre,and when places be void in the garriſons & Campe, new Captaines are placed by the Generals and Vize roys in their ſeueral gouernmẽts:but with vs the Lords of the priuy Councell do commonly appoint them. *Captaines choſen by the counſell of warre & ſtate, or by Vize-royes of prouinces.*

Gent. Truly,the electiõ made by ſuch perſonages muſt needs be good & ſure.

Capt. It ſhold ſeem ſo indeed:neuertheleſſe it hath bene ſeen many times,that both ſome Generals,Vize-royes,& Counſellers alſo haue miſſed in the conſideration therof,beſtowing thoſe charges vpon their followers, & Court-familiars and fauorites,whereby hath riſen dammage to the Prince,& diſcredit to the action: for by means of ſuch fauorit-elections,many valiant & skilful ſouldiers do remaine without charge,fit for their skil and valour; wherby(remayning in ſeruice) they obey not their ſuch choſen officers,neither do they attempt ſuch honorable enterpriſes as often times are offered,ſeeing that they are neither to be honored, nor rewarded for the ſame, ſeeing that men of litle good ſort, *Biſognios*, and of ſmall skill and experience, are only by fauour, preferred before them vnto thoſe charges,due to them by right;which is the cauſe that Military diſcipline is fallen to decay,and ſtandeth in great need of reformation. *Litle conſideration vſed many times in beſtowing their charges. Inconueniences ariſing from fauorite elections.* *The expert ſouldier loth to obey the vnexpert Captaine.*

Gent. How might that be?

Capt. Mary(in mine opinion)with the Princes & Potentates due reputation, fauour & regard:the which may eaſily be done thus. When any new Companies are leuied and rayſed,then not to giue the conduction and charge of them, for affection and fauour,vnto ſuch as lie fawning in the Court for the ſame,but to giue order vnto their Generals,Vize-royes and Colonels,aſſiſting in their Camps,and in the gouernment of their ſeuerall Prouinces, to ſend them lyſts or rolles of the moſt ancient,moſt skilfull and beſt renowned Lieutenants that they haue, and out of thoſe to elect and chooſe Captaines; and of thoſe which before were Enſignes, to chuſe for Lieutenants: and Sergeant to be Enſigne-bearers;and Caporals to be Sergeants; and of the beſt approued ſouldiers to chuſe for Caporals. And the verie ſame orders ſhould the Vize-royes and Generals obſerue,& not to elect him for Captaine who neuer was Lieutenant;nor him for Lieutenant, who neuer was Enſigne:& that the Treaſurers of the Campes and Nauies ſhould not ſet downe place to an Enſigne-bearer,who neuer was Sergeant;nor to a Sergeãt, which neuer was Caporall: and that this order among thẽ all ſhould be inuiolably obſerued & kept:by this order ſhold the cõpanies be perfect & wel diſciplined *God order for reformation.* *Captaines to be choſen out of the beſt approued Lieutenants.* *None to be captaines except firſt a Lieutenant.* *None Lieutenant but firſt an Enſigne.* *None Enſigne but firſt a Sergeant.*

conſeruing great quiet and good order amongſt them; the ſouldiers vſing great obedience to their officers, ſeeing themſelues commanded by ſuch skilfull maiſters, and euery man will in his roome & place, vſe his diligence, skill, valour, and endeuour, hoping thereby to aſcend to the degrees of others before him.

Hope of preferment makes men obedient & diligent.

Gent. But with vs in *England*, where (thanks be to God) we haue had litle occaſion of warres, this order would hardly be obſerued, conſidering the litle choiſe we haue of men of ſuch ſort.

Capt. True it is, we haue ſmall choiſe in deed: neuertheleſſe, there bee manie braue men of our nation which haue long followed the warres, both in the Low countries, France, and other places, many of them ſpending their wealth and patrimonie in the ſame, and men of good ſufficiencie, were they imployed, yet reſt they obſcure and without charge many of them, by reaſon of the fauorite election afore named. What courage then to follow warres?

Many haue ſpent their patrimony in wars, but few enriched therby.

Fauorite election a croſſe to olde ſouldiers.

Gent. But many of your French and Low-countrie ſeruitors do hold too high an opinion of themſelues, thinking that for a few yeares ſeruice in forraine parts, they merite an euerlaſting reward and pay: and your common ſouldiers, the action once ended, do ſcorne to returne to their former occupations and trades.

A fond conceit of ſome ſeruitours. A worſe mind of ſome common ſouldiers.

Cap. Both thoſe ſorts do I deepely condemne with you; the firſt, as men fondly conceited & inconſiderate; the ſecond, as men neither good for peace nor warre. But we muſt not ſay they be all ſuch, neither many ſuch, I hope; for I do know many others braue and honeſt men, that liue contented with their lot, though in meane eſtate, not begging nor crauing with bolde and ſhameleſſe faces, (for the more honeſter mind, the leſſe apt to beg and craue) but applying themſelues to ſome honeſt courſe and trade, to maintaine their poore liuing; well knowing that *The warres once ended, the Princes purſe not able, neither neceſſarie to maintaine all idle*: neuertheleſſe, the warres againe reuiued, *As readie to ſerue, as the proudeſt he.* And again, I do know manie others, men of honeſt minds, and of good courage, who hauing long followed the warres, and of good proofe in the ſame, being out of action by the aforeſaid occaſions, and hauing no trade, few friends, and leſſe meanes, do paſſe (God knoweth) but barely, a thing to be pitied, and wiſhed to be conſidered. Now out of theſe (I ſuppoſe) ought our Captaines and Officers to be choſen, in theſe dangerous ſeaſons, with ſome reaſonable allowance toward their maintenance, leuied by ſuch meanes, as ſhould be found moſt fit by her Maieſties honorable Counſell; and ſubiects and commons moſt willing to the ſame: which, no doubt, would prooue to wonderfull great effect, eſpecially to our true training and bringing men to be ready: for, Captained as we are, our blind ignorance may chance breed our owne woe.

The first to be diſliked, as men inconſiderate. The ſecond as mẽ nither fit for peace nor warre. The more honeſt minds leſſe apt to beg or craue.

The warres ended the Princes purſe not to maintaine all idle.

Men hauing long followed the warres, & of good proof in the ſame, moſt fit to bee choſen for Captaines.

Gent. Such choiſe (in mine opinion) were good indeed, to bring our people to more perfection in ſoldiarie points, eſpecially to bring them to the face of the enemy to fight: but we haue Muſter-maſters appointed in euerie Shiere, men of ſeruice and skill, both to inſtruct our Captaines, and to traine our ſouldiers, who haue pay allowed them for the ſame.

Muſter-maiſters what they ought to be.

Capt. Sith the other cannot be, ſurely this courſe is good: prouided that theſe Muſter-maſters be ſuch men as I ſpeak of; I mean expert, valiant, skilfull, diſcreet, & eſpecially diligẽt men; but if they want thoſe parts, *As good neuer a whit, as neuer the better*: wherfore I could hartily wiſh (conſidering this fickle & dangerous world)

would) our Lieutenants of euery ſhire, and Captaines and Gentlemen of the ſame, to prouide them of ſome good Officers at the leaſt: not onely to furniſh themſelues with good armour and furniture, but alſo to cauſe all others, able to carrie the charge thereof, to prouide them in like ſort, chaunging thoſe diſproued blacke Billes and Bowes into good Muskets, Pikes and Corſlets, not fauouring any for friendſhip or affection, nor wincking at faults, I know not for what ſmall cauſes, but to ſee it performed. Wiſhing alſo our trayning Captaines, and Muſter-maiſters, to looke well to their charge and dutie; and beſides their diligent trayning, to ſee each fault amended, and that in due time, for their owne credits ſake.

In ſtead of bowes and bills good pikes & muskets.

A caueat for Captaines and Muſter-maiſters

Gent. What courſe would you wiſh to be taken, for the redreſſe and reformation hereof, men hauing already prouided bowes and billes?

Capt. Marrie thus: Looke in euery Pariſh, how many men might be found able to beare the charge of an Armed Pike, which is with a Corſlet complet, let them be charged therewith; the charge at the moſt will not amount vnto aboue fortie ſhillings: a ſmall ſumme to a man of any wealth, conſidering it is for the defence of lands, goods, libertie, life and all.

What order for conuerting billes and bowes into pikes & muskets.

A good conſideration.

Gent. But happely they will grudge thereat, as a great charge.

Capt. The more pitie and ſhame: For how many men able to beare the charge thereof, ſhall you ſee in a lewd Ale houſe, tauerne, and bowling Alley, to loſe twiſe that value in one day or night, at cardes, dice, or other vnthriftie game, and neuer grudge thereat? But their grudging at ſo good an action, ſheweth their ignorance, and baſe beaſtly mindes: but grudge or grudge not, prouide it they ſhould, had I the commiſſion: for the vrgentneſſe of the cauſe doeth deepely require it. And againe how many of theſe grumbling ſnudges ſhall you ſee which repine at a peny for ſo good an action, yet can finde poundes by hundreds to buy their poore neighbours out of their liuings, goods and all; men of bad conſideration and worſe conſcience. Next, ſuch men as ſhould be found able to beare the charge of a Musket, ſhould prouide one in like ſort, which with 30 or 40 ſhillings charge would be well performed: and where one man were not ſufficient thereunto, ioyne a couple; where not two, ioyne three; where not three, ioyne foure; ſo making a common purſe to buy the ſame: for I could wiſh the moſt weapon in the field to be Pike and Musket. Againe, ſuch as haue Calliuers impoſed vpō them already, if they be found men able for more, (for we muſt ſtretch our abilitie in this caſe) turne them to a Musket on Gods name, paſſing ouer the charge of the Calliuer vnto another leſſe able; then ſuch as ſhal thus be found, ſee they prouide it good and ſufficient; & not ſuch rotten ſtuffe as commonly I ſee. Now for ſuch as haue bowes and bils impoſed vpon them already: let them alter the weapons, prouiding in their ſtead good Pikes & Muskets: & where one is not found ſufficient, ioyne two or three, as I ſayd before.

A bad ſort of people.

To grudge at a good action, ſigne of a beaſtly mind.

A miſerable minde.

Good counſel.

Pike and muſket the moſt weapon in the field.

Gent. What, would you haue them caſt away their bowes and billes, hauing bene charged with the ſame already?

Capt. Not ſo, they may ſerue yet to many purpoſes. For all thoſe weapons (before ſpoken of) prouided, ſhall ſerue but for your trayned men: and your bills and bowes, which euery man, or moſt men can handle, ſhall, (if neede require) be put in place of ſeruice befitting them weapons.

Bowes and billes yet ſeruiceable in ſome ſort.

Gent. What order would you wiſh for match, powder and ſhot, would you haue the burthen thereof vpon ſuch as do find the peece?

An order for powder & match for training dayes.

Capt. No, not all the charge: but I would wiſh a generall ſeazement to be made vpon euery pariſh, for as much as ſhold ſuffice for officers wages, match, & powder for one trayning day, to be deliuered vnto the Captaine, or ſome other officer for that purpoſe, to prouide the ſame ready, to ſee it iuſtly diſtributed, & wel ſpent in the training (with as litle waſte as might be) and ſo from training to training, as the ſeruice ſhall continue.

Gent. And for the generall ſtore, what ſay you of that?

A great care to be had for the generall ſtore.

Capt. I hope there is ſufficient care had therof already: if not, I could wiſh ſuch as haue the commiſſion & charge thereof to looke well thereunto, hauing a due regard to the waightineſſe of the cauſe; and to ſee that the moneys collected for that purpoſe be ſubſtantially and throughly beſtowed in pikes and corſlets, muſkets, caliuers, match, powder, lead, and all other things thereunto appertaining; that in the time of ſeruice nothing be found wanting: for wants in time and pinch of ſeruice haue hindered great actions, as I my ſelfe & others haue ſeene: beſeeching our good Lord God, ſo to ſtirre vp the hearts of our high Commanders (as I truſt he doth) to haue great care and due regard to the moſt neceſſary prouiſion of ſuch munitions, ſith our moderne wars depēd much vpon the ſame. But I haue long digreſſed frō the officer I had in hand, vnto whō I think it is time to returne.

Want of neceſſaries in time of ſeruice, hath hindred great actions.

Gent. It was of the election of a Captaine of foot-bands; but of the parts of his charge and dutie you haue not yet touched.

whom to bee choſen for a Captain of footbands.

Capt. Then, a Captaine of Infanterie, or foot-band, ſhould haue in him all the parts (before rehearſed) of a perfect ſouldier, hauing worthilie paſſed through all the aforeſad degrees of ſeruice: as firſt to haue bene a Caporall, from a Caporal to a Sergeant, from a Sergeāt to an Enſigne, from an Enſigne-bearer to a Lieutenant, and from a Lieutenant to this office; & one who in all thoſe offices hath well performed his parts and duty, to the end he may the better know how to cōmand and order euery one in his degree. And particularly it is to be reſpected, that he be a man that feareth God, vertuous, wiſe, politicke, valiant, careful, vigilant, and (as a thing of great importance) well experimented in martiall affaires: for diſorderly ſhall he gouerne in warres, which neuer was skilfull in the Arte.

The parts to be deſired in a Captaine.

Diſorderly ſhall he gouerne in warres, who was neuer skilful in the arte.

Gent. So many good parts in one ſubiect are hard to be found.

Capt. Yet ſome ſuch men there are; and where there are not all thoſe parts, let the choiſe be made of ſuch, in whom moſt are to be found.

Gen. Being choſen, and his charge appointed him, what is then required?

The captains care in the election of his officers.

Cap. To know how to chuſe neceſſary officers for the gouernment of his company, and to ſee they may be ſuch, as their degrees and places ſhould require; for in this election he ſhall greatly ſhew his skill, prudence, and wiſdome; the which parts if he himſelfe haue, he will chuſe men like vnto himſelfe; if not, then *per contra*, as it hath bene ſeene many times; yea and thoſe places to haue bene ſould, and chopped and changed for money.

Similis ſimilem ſibi quærit.

Gent. What number would you haue a foot-company to containe?

Capt. Some man may be ſufficient to gouerne three hundred, ſome two hundred, ſome one hundred, as I haue ſaid before.

Gent. How would you haue a Companie ſorted with weapons?

Capt.

Capt. To euery 100 men I wold wiſh 40 pikes, 10 halbards, of which nũber 2 or 3 to be targets of proof, 25 muskets, & 25 calliuers, & ſo to the higher nũbers. *The due ſorting of weapons.*

Gent. Thus you would haue as many pikes with halbards, as you haue of ſhot: but I haue heard ſome ſay, that they wold two thirds of ſhot to one third of pikes.

Capt. True, prouided that there be the ful number of muskets, or rather more; for I would be as well prouided to defend, as to offend.

Gent. What importeth ſo great a number of muskets?

Capt. Much, conſidering the wonderfull execution of that weapon: for one good musket may be accounted for two calliuers. *The aduantage of musket.*

Gent. But the musket is a heauie cariage, and painfull to be handled; not fit but for ſtrong and mighty men.

Capt. You would not be of that mind, had you euer ſeene any good ſeruice, eſpecially amongſt the *Spaniards*, who vſe them almoſt generally: and I am aſſured that for courage and ſtrength, we are comparable, yea do excell them: but manie of vs want their practiſe, yea and happily their obedience. Now conſidering that the musket hath his reſt, the heauineſſe thereof is many times eaſed: and againe, for the handling, *Practiſe maketh perfect*, as in all other weapons. *Skill & obedice.* *Practiſe maketh perfect.*

Gen. What officers think you neceſſary for a Cõpany of three hundred men?

Cap. One Lieutenant, one Enſigne-bearer, two Sergeants, twelue Caporals, after the reckening of 25 ſouldiers to euerie ſquadron (the Captaine ſquadron accounted for one,) one harbinger or furrier, one Chyrurgian skilfull in his arte, & his ſeruant. three Drummes, and as many Phifes. *Neceſſary officers to a band of three hundred men.*

Gent. The Company newly leuied, and officers choſen, what is the Captaine to do firſt before he march with the ſame?

Capt. Hauing prouided his Colours, he ſhall with ſolemnity incõmend it vnto his Alferes or Enſigne-bearer, as before is declared, and then ſhall diuide his ſouldiers into ſquadrons, chuſing for his owne ſquadron the moſt experimented men, and of beſt ſort. *The Enſigne to be incommended to the Enſigne-bearer.*

Gent. Wherfore doth the Captaine chuſe a ſquadron to himſelfe, being commander of the whole Companie?

Capt. Becauſe it is a matter of much importance, and neceſſarie, in reſpect that this ſquadron ſtandeth in ſuch predicament, that any Gentleman, though neuer ſo illuſtrious; and any Alferes, Lieutenant or Sergeant may ſerue as ſoldier in the ſame, without any diſparagement or blemiſh to their reputation, although they themſelues haue had men vnder their charge; for ſuch ought to be aduantaged in their payes, & the Captaine to reſpect and eſteeme them as his owne perſon, and counſell and conſult with them, chuſing officers out of them when any do want. And if any peece of ſeruice be preſented, wherein hee ſhall be occaſioned to vſe ſome part of his company, he chuſeth of thoſe, ſuch as he ſhall think good, & incõmendeth the action vnto them: & to giue breathing vnto men of leſſe account in encounters & skirmiſhes which are offred: &, euen for very ſhame of them, the cõmon ſouldiers (knowing they ſhal be marked & noted) will fight more reſolute and ready. Beſides, men of ſuch ſort are a great beauty to the band, being commonly better armed then the reſt. *The Captains Squadron.* *No blemiſh vnto any Gentleman, to ſerue as a common ſouldier in the Captaines ſquadron.* *Aduantaged in Payes.*

He is thẽ to procure what he can, that his ſouldiers be good Chriſtians, & men fearing God (for God knoweth, there be a nũber neither regarding their creation *To inſtruct and procure his ſoldiers to the feare of God.*

nor Christianity.) For no action is either good, or like to be, where this foundation is not first laid.

To appease debates.
To reprehend & punish dishonest liuers.
Few bad do corrupt a number of good.

If there be any banding, secting or passionating amongst them, he is to appease & compound the same: & those that do liue dishoneſt, infamous, or tatched with foule crimes, let him first charitablie reprehend them; whereupon, if they amend not, yet more seuerely; if not then, and all necessarie preuentions vsed, let them be cashed out of the band; for a few bad do soone corrupt a number of good.

To exercise them often to their Armes.

He must diligently vse his soldiers to the often exercise of their Armes, seeing them well furnished therewith, shewing them the vse of euerie kind of weapon: and what orders they are to obserue at encounters and battels, according to the nature of their opposite enemy: for there is a difference between the *Germane*, the *French*, the *Italian*, and *Spaniard*, being nations of different humors, natures, courage, policie, & conduction. Also that he see them practise all other exercises necessary for wars, so that nothing be done disorderly in the Cõpany: carefully in all actions obseruing military discipline: being equal with his souldiers in al perils & paines, which is a great encouragement to the souldiers, & an encreasing of their loue towards their Captaine & not to send them out like headlesse men, himselfe remaining behind safe vnder couert, as such sometimes haue bene seene.

Different nations different natures.
To practise all military exercises.
The Captaine equall with his soldiers in all perill and paine.

To muster and traine often.
The order to be obserued in traynyng.

He shall often times muster, shew, and traine his Companie, causing them to march in good order, keeping well their arayes, in march, countermarch, in ring, in S. D or G. formes, all which are framed by the only order of marching: and bring them into squadrons of battels of sundry sorts and formes, shewing them how to march orderly therein, how to charge either against horse or foot, how to retire with their faces still toward the enemie: and how to turne their faces, making front of either flanke or traine, and to wheele about, if occasion should serue, but a thing hard, and not easie to be perfourmed: how to disband, and how to fal into troupes. By these meanes he shall know his Companie the better, be better reputed of, and make his men more apt and ready for action: a thing very important for a Captaine.

Men ready for action to great importance.

Great care to keep aray in marching.

Disorderly behauior of bad souldiers breedeth many mischiefes

When hee marcheth with his Company, he must be carefull that his souldiers breake not out of ranke, although it be in their own countrie, or in country of our friends, out of danger or suspect of the enemie, to the end that they neither rifle, spoile, nor rob houses, gardens, or orchards, and other places of corne & fruites; for therby do rise and result many times great scandals and tumults amongst the naturals of the country wherein they march, & is cause that they are but badlie entertained at their lodgings: wherin he is to haue great care & vigilancy, that his soldiers grow not licencious vpon their poore hosts, neither offer them abuse for their meat and prouision, but be contented with such as is giuen them, according to the abilitie of their poore hostes, chastening with great seuerity the offenders herein: for in so doing he shall acquist & gaine the name & reputation of a Christianlike, vertuous & discreet Captaine: but Captaines doing the contrarie, suffering their souldiers to grow ouer licentious and lewd, haue procured to thẽselues & their companies great hatred, infamies & grudgings, with their throats many times cut by the country Boores: examples hereof too too many, both in France and the Low-countries.

Disorders to be punished.

The tolleratiõ of euils breedes many inconueniẽces.

Now his band being of compound weapons, hee himselfe may vse and carie either

either Calliuer, Musket or Pike, as he ſhall fancie moſt, but the Pike is moſt honourable, deuiding his ſhotte into fore-ward and rere-ward of the pikes, contayning in their center the Enſigne and Halbards. But if the band be al pikes, or all ſhot alone, (which order I haue ſeene obſerued amongſt the *Spaniards*) then being pikes, he is by dutie to carie a pike, himſelfe armed in a Corſlet complete, wherein he ſhall be curious to haue them gallant and goods which will cauſe his Company to imitate him therein. But if his Companie be all ſhot, then is he in like ſort bound by dutie to carie a peece, either Musket or Calliuer, gallantly furniſhed, and neatlie kept. And not in muſters and traynings to carie neither long-ſword, neither Halbard, neither leading-ſtaffe, neither halfe-pike, neither yet a page going before him; for it is a *Biſognios* tricke, ill beſeeming a perfect Captaine.

What weapon the Captaine is to vſe

Vnſoldierly trick of a training captaine.

If he be commaunded with his Company to the defence and guard of any place; he is to repaire, to rampiere, to entrench, and to fortifie himſelfe therein, with all ſpeed, care, diligence, and forecaſt: and defend the ſame with reſolute valour, as diuerſe valiant Captaines haue done, both in time paſt, and alſo in our age, whoſe fame in hiſtories, is, and euer will bee freſh, in deſpight of enuie.

The captaine being ſet to defende any place, what he is to do.

If the Armie be encamped; and being commanded vnto any peece of ſeruice, he muſt ſhew therein great valour, vigilancie and care, animating his ſouldiers, and conſulting with his officers and moſt experimented men of his Companie, and after determination had, to ſhew himſelfe couragious and reſolute. But let him well beware that he attempt nothing inconſiderate and raſh, as manie ignorant men haue done, to their owne and companies confuſion. For thoſe that go without preuention, preconſideration, and forecaſt of ſuch ſucceſſes & caſualties as may betall, do in the very action find thēſelues puzzeled, amazed, and at their wits end, with their ouerthrow in fine. Therfore to auoid ſuch inconueniences & hazards, let the Captaine be wel aſſured to obſerue the orders & inſtructions giuen him by the higher Cōmanders, if manifeſt occaſion be not ſeen that in obſeruing the ſame, great dammage may enſue, or good occaſion be loſt.

Commanded to any peece of ſeruice, what he is to do.

To attempt nothing inconſiderate and raſh.

To obſerue the orders giuen by his commander.

It importeth him alſo much to be a good Oratour, and to haue a ſweet vaine in ſpeech, and all other Commanders and officers in like ſort, that haue people in charge, to perſwade, moue, or diſſwade their ſouldiers, as occaſions ſhall ſerue; to perſwade to good actions; to diſſwade from bad factions; to commend valour and vertue; to reprehend faults and vices, and things done without order and diſcipline; to encourage, moue and ſtirre vp mens minds to battels & braue encounters, and to induce men by good ſpeeches to endure patiently, and with conſtant hearts the toyles, wants, and diſcommodities, which commonly are preſented in caſualties of warre, wherby they ariſe not in mutinies, nor into ſuch other diſſolutions, by reaſon of impatiencie in ſemblable aduerſities.

To be a good Oratour, and to what purpoſe.

A point of great vertue it is in a Captain, not to be ouer couetous and greedy, but franke and liberall amongſt his ſouldiers and followers, ſuccouring them to his beſt abilitie in their neceſſities & needs; procuring that they be orderly paid, and not baſely to wrong them, in detaining, deceiuing and robbing them of their payes, as ſome bad Captaines haue bene wont to do, who with litle honeſtie, and leſſe feare of God, haue made a practiſe thereof: ſuch vnworthy Captaines the Lord Generall ought ſeuerely to puniſh.

A captaine not to be ouer couetous, but carefull for his ſouldiers.

Item, ſuch day as his Company hath the gard, he muſt ſend his Sergeãt to take the Word from the Sergeant Maior, or ſome other ſuch perſonage who hath order for the ſame, with the which Word he is to gouerne his watch and Sentinels for that night: for therein conſiſteth the ſecurity of the Campe.

To take the word

In viſiting the Sentinels & Corps de gard he muſt vſe great care & diligence: and ſee that his ſouldiers and officers do preciſely performe what toucheth them therein, according to the order he ſhall haue receiued from his ſuperiour Commanders: and cauſe that his Company be alwaies prouided with candles & torches, & ſuch other lights, for the redreſſe of many caſualties chãcing in the night.

Carefull to viſite the Sentinels.

To be prouided of lights for the night time.

He ſhall obey the ordinances of the Sergeant Maior, and other his ſuperiour officers with great good will & diligence, reſpecting thẽ, & accompanying them, the more to moue them to loue and affect him: and ſhall procure to learne from thẽ the orders & courſes they ſhall take in proſecuting the warre: for it is a great vertue to be curious to know that which toucheth his profeſſion: & it importeth him much to vnderſtand it perfectlie, wherby he may find himſelfe furniſhed with more conſiderations, and more ready for matters cõmitted vnto him, thereby to aduance himſelf in his Princes ſeruice, and in credit and reputation to his owne perſon, bearing with a magnanimous and equall mind, as well his aduerſe, as his proſperous fortune, a rare and principall vertue.

To be obedient & diligent about his ſuper. our comm. rs.

At marching vnto any place with his companie, let him procure that they bee prouided of neceſſarie baggage: but yet with ſuch moderation, that in no ſort he ſuffer his ſouldiers to be peſtered and cumbred; but as light as may bee, but with their armour & weapon, to the end, that if occaſion be offered to encounter with the enemie, they may finde themſelues more ready & determinate to gaine booties from them, then carefull to conſerue their owne traſh and baggage: not permitting any ſouldier to haue any horſe, but ſome fewe and particular of his moſt expert men, the which may ſerue in ſteede of light horſes, to diſcouer and take knowledge, and to ſend aduiſes, if need ſhould require.

Neceſſarie cariage and baggage in marching.

But not ouer peſterſome.

Few horſes to be permitted in footbands.

In his alodgements, he ſhold moſt ordinarily lodge amongſt, or neere his ſouldiers, giuing them examples with his vertues and good behauiour, being companion with them in hardnes of liuing, not procuring to himſelf dainties & curious meats, imitating herein *Cato Vticenſis*, and *George Caſtriot* Lord of *Albania*, *Hannibal*, *Scipio*, *Caſar*, and others.

The Captaine is moſt ordinarily to lodge among his ſouldiers.

Not to be ouer curious in his diet and fare.

Examples.

In fine he ſhal entreat his ſouldiers with gentle words & good works, accounting them as his ſonnes and children, whereby they may loue him, & reſpect him as their father; and being thus linked, he ſhall enterpriſe no act, wherein they will not follow him with great loue, willingneſſe and valour, boldly aduenturing their liues for their common honour, gaining to himſelfe thereby great fame & reputation with the Generall and the whole Armie; therby binding his Prince to reward him according to his valour, vertue and deſerts.

To entreat his ſouldiers with gentle words & good works.

A good Captaine is as a father to his ſouldiers, and they as children vnto him.

Gent. You haue declared many good parts belonging to a Captaine: I would that our Captaines were halfe ſo well furniſhed.

Souldiers louing their captains wil aduenture their liues for their common honor.

Capt. I would they had all theſe good parts, and manie more, if more might be: then ſhould we haue leſſe cauſe to make reckening of our enemies.

The end of the ſecond Booke.

THE

THE THIRD BOOKE OF WARRE DISCOVRSES AND MARTIAL DISCIPLINE.

The first Dialogue:

VVherein is declared the order of a Romane Legion, with their deuiſions: and the manner of the Grecians Phalanx: alſo a forme of trayning to be practiſed and vſed amongſt vs, with the vſe and handling of each weapon in their kinde: and other militarie points.

Gentleman.

FRiendly Captaine, your yeſterdayes Diſcourſes, haue ſo delighted, contented and enflamed both my ſelfe, and theſe other Gentlemen, that we muſt needs entreat you to proceed, and to ſpeake ſomewhat of the higher Officers of the field: wherefore I pray ſatisfie vs herein.

Capt. Gentlemen, I would thoſe parts of skill were in me to anſwere your requeſtes, and to ſatisfie your expectations. Neuertheleſſe ſeeing you are ſo well bent, and inclined to the vnderſtanding of Militarie courſes; I will, to my beſt abilitie and knowledge, declare vnto you ſuch matters as I haue found by mine owne experience, eyther learned from the directions of braue Commaunders vnder whom I haue ſerued, or gathered out of the beſt authors which haue written vpon this ſubiect *VVarre*. Indeede at the beginning of theſe our ſpeeches, I did not then thinke to haue marched ſo farre into this Martiall field, for my fiue or ſixe yeares diſcontinuance from action, had almoſt driuen all the courſes, order and methode thereof out of my mind and memorie: but your curious demaundes and queſtions, haue both drawen me on, ſharpened my wit, and refreſht my memorie: wherein if I haue erred, or may miſſe hereafter (as no man but erreth, ſome more, ſome leſſe) I ſubmit my ſelfe to the cenſure and correction of men more experimented, and of better parts then my ſelfe.

Diſcontinuance breedeth forgetfulneſſe.

Gent. Truely Captaine, you ſay very well; and I would we had many of no meaner partes, nor of no worſe meaning then your ſelfe, in mine opinion; then no doubt, but our common ſouldiers ſhould be better inſtructed, and be better dealt withall, then they now are by ſome of their Captains. But letting theſe matters paſſe; I pray what order would you wiſh to be obſerued in the trayning of our ſouldiers here with vs in the countrie, ſith we are commanded to traine, and as yet I ſee litle good order obſerued in the ſame.

Capt. Touching the true and orderly trayning of your people in this our Mo-

derne *Militia*, I haue in generall roued ouer ſome part thereof alreadie; but not ſo particularly as ſuch an action would require: wherein I could heartily wiſh, that, as neere as poſſible we might, we ſhould reduce our ſelues with ſuch armes as we now vſe, vnto the forme, manner, and courſe of the auncient Romanes in their *Militia* and diſcipline of warre, although ages, ſeaſons, and inuentions, haue altered much and many weapons by them vſed.

The militarie diſcipline of the Romanes to be followed.

Gent. I pray what order did the Romanes obſerue in their warres? and how were they armed?

Capt. The Romanes deuided their foot people of warre into men armed with heauie armour, (or, as we may tearme it, armor complete) and into light armed men. Thoſe which were light armed, they called by one common name, *Velites*; vnder which word they vnderſtood all ſuch as carried ſlinges, darts, bowes, croſſe-bowes, and ſuch like: the greateſt part of whom, were armed with a skull or cloſe Cellat for the head; and had, beſides their other weapons, a ſhield or Target vpon their left arme to defend and couer themſelues, and did fight or skirmiſh in ſtraggling ſort, a good diſtance from thoſe that were armed with heauie or complete armour in Squadron. Vnto thoſe may we well compare our ſhot, eſpecially them of the forlorne hope, or *Enfans Perdus*, as the French doe terme them. Their people armed with heauie or complete armour, had firſt a Cellat or Burgonet, which couered their head, and reached ouer their ſhoulders: then for their bodie a Cuyraſſe, whoſe flappes or taſſes couered their thighes, euen down to the knees; their legges and armes were armed with Greaues and Vambraces: and for their defence they carried a ſhield of foure foote long, and two foot and a halfe broad, bound about with a band of yron; and for weapon they had a ſword, not ouer long, girt vnto their left ſide, & a ſhort dagger vpon their right; and in their hand a Iauelin or Dart, which they called *Pilum*, the which at the beginning of their fight they did lance or dart at the enemie: vnto theſe may we compare our Corſlets and Pykes, whereof we frame our battels or battaillions: and our armed halbards, partizans, and other ſhort weapon. Commonly a Romane army conſiſted of two Romane Legions, which was a Conſuls armie, and of two *Auxiliarie* legions, which were of their friends or confederates.

Graui armatura of the Romanes.

Velites of the Romanes, and their armings.

The arming of thoſe of graui armatura.

A Romane armie.

Their Legion conſiſted at the firſt, but of three thouſand footmen, and three hundred horſe; but afterwards encreaſed vnto 5. 6. or 8000. foote. Their legion they deuided into *Cohortes*, *Maniples*, and *Centuries*. Euery legion of 6000. foote, was deuided into ten *Cohorts*, at 600. to euery *Cohort*, and euery *Cohort* into ſixe *Centuries*, after 100. men to euery *Centurie*: and euery *Centurie* into foure *Maniples*, after 25. ſouldiers vnto euery *Maniple*, or into fiue *Maniples*, at 20. ſouldiers to euery *Maniple*. Moreouer, euery legion was deuided into 3. partes, or orders of battels, into *Haſtati*, *Principes*, and *Triarij*. The *Haſtati* were ſet in the front of their armie, in order of Squadrons thicke and ſure; behinde them were placed the *Principes*, but with the order of their Squadrons more rare and thinner. After theſe againe were ranged the *Triarij*, but with the order of their Squadrons, much more thinner then the *Principes*.

Romane legion Cohort, Centurie, Maniple.

A legion diſtinguiſhed into 3. Haſtati, Principes, Triarij.

Their order of placing.

Now their ſlingers, darters, archers, or croſſe-bowes, and ſuch light armed, were placed without theſe Battels, or Squadrons on the flanks and front, between the horſemen and their armed battell: as we do, or ought to do (in mine opinion)

Velites, their place to fight.

our

our ſhot, ſome fillets of Pykes, Halberds, and ſuch other ſhort weapon.

Gent. What ſort of men thinke you fitteſt to be choſen for ſouldiers, and to be trayned; and what order in their trayning?

Capt. I ſuppoſe, men of the better ſort, from the age of eighteene yeares vnto thirtie yeares, are fitteſt to be choſen. Now the ſignes whereby to coniecture the perſons moſt apt for warres, by the Phiſiognomie, and proportion of bodie, are theſe: The eyes quicke, liuely & piercing; the head and countenance vpright; the breaſt broad and ſtrong; the ſhoulders large; the armes long; the fingers ſtrong and ſynowie; the belly thinne; the ribbes large; the thigh bigge; the legge full, and the foote leane and drie: for whoſoeuer is of this diſpoſition, and with theſe conditions, cannot chuſe but be nimble and ſtrong, which are two qualities, chiefly to be required in a ſouldier.

Whom fitteſt to be choſen for ſouldiers.
Signes by the phiſiognomie.

I could wiſh that thoſe Bandes which are appointed to be trayned (for of the Officers I haue ſpoken before) ſhould be by their Captaine, Muſter-maiſter, and other Officers, trayned at the leaſt once euery moneth, or oftener, as the weather and ſeaſon will permit: and euery Caporall, with his *Cabos de Camera*, to traine and inſtruct their Eſquadra, eſpecially of ſhot, once euery weeke, or once euery fortnight at the leaſt: enſigning them the vſe of their weapon, and order of ſleight skirmiſh: For often practiſe maketh men readie, eſpecially the ſhot, the which without readineſſe and skill is a weapon of litle aduantage; and in the hands of perfect ſouldiers, is a weapon of great aduantage, and of wonderfull execution.

New ſouldiers to be often trained.
Practiſe breedeth readineſſe.

Now the ſeuerall companies, hauing bene well applyed and taught for a time by their Captaine and other officers, I would wiſh, ſhould once euery three monethes, meete and ioine ſome foure or fiue companies together, in ſome conuenient place, then and there to bring them into ſuch formes as ſhould be needfull for ſo many companies. And once a yeare at the leaſt, all the companies of the whole ſhire to meete in ſome moſt conuenient place together, then and there to be inſtructed in the orders how to march, how to encampe, and how to fight: deuiding them into ſo many parts or battaillions, as vnto their chiefe Officer ſhall ſeeme good.

Sundry companies to ioyne together.
1 *To march*
2 *To encampe.*
3 *To fight.*

Gent. What courſe would you wiſh the Captaine of a ſingle companie to obſerue in the trayning of his ſouldiers?

Capt. Firſt hauing his companie leauied and choſen of the better ſort of people, as is ſaid, let your rawe Captaine, (for ſo I terme thoſe which neuer were in action) prouide himſelfe, if poſſible he may, of a good Lieutenant, and a ſufficient Sergeant, and a skilfull Drummer. Then let his people be ſuted with ſuch ſort of weapon as is appointed. The which I would wiſh to be (as I haue ſaid before) to euery hundred of men, 25. muskets, 25. Calliuers, and 40. or more of pikes and corſlets, and the reſt, ſhort weapon; as halberds, ſwordes and targets, and ſuch like.

Rules to be obſerued by a carefull Captaine.

Now hauing ſuted euery man with a conuenient weapon, I would wiſh your Muſter-maiſter, if your Captaine haue not the skil (for your Muſter-maſter ought to be a man of experience) firſt to declare vnto them the partes that ought to be in a ſouldier in generall, as before is declared; then to enſigne them the right carriage of their armes and weapon: then to knowe the ſeuerall ſoundes of the

Militarie points to be enſigned new ſouldiers.

Drumme: next to learne to keepe his ranke and file orderly; and ſo to march eyther ſwift or ſlowe, ſtep by ſtep with the ſound of the Drumme; then how to keep their array, being caſt into a ring, or any other forme; with the comming out againe, and returning into a counter-ring; and out of the ſame into a march, and counter-march: then how to make their Alto or ſtand, and how to double their rankes, vntill they bring themſelues into a iuſt ſquare of men, if their numbers will permit it; and how to double their files, eyther vpon the left or right hand, and ſo to fall off againe, both from file and ranke: and being in ſquadron, how to turne their faces on either, or any part, making front on any flank or traine, as occaſion ſhall be offered. Then the perfect vſe and managing of euerie weapon in his due nature and kind: and ſo by a continuall vſe they may (by good inſtructers) become ſoone to be ready ſouldiers.

A good Captaine will ſoone make ready ſouldiers.

Gent. Here be manie good parts vnder a few words; but they are too briefe for me to vnderſtand: wherefore I pray dilate more at large thereof: and firſt, what meane you by the cariage of his weapon?

The art of warre better deliuered by act thē words.

Cap. To diſcourſe vpō al theſe points particularly, it wold be ouer long: & might better be ſhewed in act thē in words: yet to ſatisfie you ſomewhat herein, I will ſpeak of the particulars here & there, as I ſhal be occaſioned, & ſhal cal thē to memory. Firſt therfore, the ſoldier that is appointed to cary a calliuer, is firſt to be enſigned how to cary his peece vpon his left ſhoulder, with his flaske at his girdle, or hāging by at Port-flask, or Flask-leather vpō the right thigh, & vpō the left ſide of his girdle, to haue his touchboxe faſtened by the ſtring, hanging downe ſomwhat long by the ſtrings, ſufficient to be taken, and to prime his peece with touch-powder: and on his right ſide a Bullet bagge or purſe of canuas, or leather for bullets. Alſo ſome three or foure yards of match, in ſeuerall peeces hanging at his girdle, with one peece of match of a yard long in his left hand, holden faſt by the third finger of the ſame hand, hauing the one or both the endes of the ſame, lighted, or fired. Alſo to be prouided of a priming iron or wyer, of a ſteele and flint ſtone, to ſtrike fire vpon any ſuddaine occaſion, either to ſpare the burning of match, or to fire their matches if the ſame do chance to go out. Then how to charge his peece, either with his flask or bandelier, & thē to let ſlip the bullet down into the barrell after the powder, and to ramme the ſame with paper, tow or ſuch like, thruſting the ſame downe with the ſcouring ſtick, if time will permit: or elſe (a more readier way) thus; After that the bullet is ſlipped downe vnto the powder, to put after the ſame ſome two or three cornes of powder, which will wedge faſt the bullet. This being done, let him hold his Calliuer with his left hand, (as in his charging hee ought to do the like) griping the ſame by the ſtocke, ſomewhat neare vnder the cock, betwixt his thombe and foure fingers; then, holding the noſe of his peece ſomwhat vpward (for not to endāger his fellows) to take the one end of his lighted match, with his forefinger, midle finger, & thōbe of his right hād, & ſo to cock the ſame, hauing a regard that it may fall due within the pan: finally if it be a crooked ſtock peece, to ſet the ſame vnto the left ſide of his breaſt, retiring his right foot ſome halfe ſtep behind the left, or aduancing the left foot ſome halfe pace before the right, and ſo to take his due leuel: & holding the hindermoſt part of the ſtocke betwixt the thombe and fore-finger of his right hand, & with the other three fingers to draw to the ſerre, & ſo to diſcharge his peece wit h agility hauing done the

The Harquebuzier his armings and weapons.

To charge.

To cocke the match.

To leuell.

To diſcharge.

which

which, to retire ſouldier-like, and charge againe, giuing place to his next fellow, or ſeconder. But being a ſtraight ſtocked peece (the which I hold for the better) he is to place the ſame vpon the right ſide of his breaſt, faſt againſt his ſhoulder, leuelling and diſcharging, as aforeſaid. And for other armes he is to be fitted with a ſhort ſword, and meane dagger, and a Spaniſh morion. Now the musketier is to cary his musket vpon his left or right ſhoulder; for it importeth not much on whether, ſo they obſerue the order of the firſt rancke, with his Forke or reſt in his left hand, faſtned about his hand wreſt or little finger by a ſtring, hauing his flask and touchbox fitted as before is ſayd, or hauing a bandalier, the ſame to be ouer the left ſhoulder, and vnder the right arme. Now to charge the ſame, he muſt hold his musket with his left hand, hauing his reſt trayling by the ſtring, and put the but end of the ſtocke vpon the ground, then with his flaske or bandalier to charge his peece with powder, ſlipping downe the bullet into the barrell after the ſame, and to faſten it with two or three cornes of powder, as is aforeſayd; then to clappe the musket into his forke, planting the lower end or pike of the reſt into the ground neare vnto his left foote, and reſting the but ende of the ſtocke vpon his left thigh, then to prime his pan with touch powder. And hauing his match ready, as before is ſayd, to take the peece of match that hangeth by the midle or third finger of his left hand, betwixt the thombe and fore finger of his right hand, and with his middle finger to meaſure at what length to cocke the ſame, to fall with a proportioned length into the pan. The which being done, let him retire his right foote ſomwhat backe, and ſtand firme vpon the ſame: and holding faſt both the musket and reſt with his left hand, to raiſe the but end of his musket from his thigh vnto his breaſt, and to faſten the ſame firme and cloſe vnto his right ſhoulder and breſt, holding faſt the ſayd hinder part of the ſtocke betwixt his right thombe and fore finger, drawing downe the ſerre with the other three fingers, and ſo taking due leuell to diſcharge. Hauing performed the which, let him vncocke his match, clap his musket vpon his ſhoulder with a halfe turne, and ſo retire, trailing his reſt or forke by the ſtringe, and giuing place to others, go charge again: finally for other armes, a reaſonable ſhort ſword, a meane dagger; with no morion, but a faire hat and feather.

To retire. *To recharge.* *The musketier his arming and his forke weapon.* *To charge.* *To cocke his match.* *To leuell.* *To diſcharge.* *To retire.* *To recharge.*

Gent. Thus I perceiue your fiery ſhot haue many buſie skils, without knowledge of all the which it is hard to become a perfect ſhot.

Capt. True; and therefore often to be practiſed: But here let the muſter-maiſter and trayning Captaine be well aduiſed not to ſuffer their ſhot to cary any bullet about them, in time of their trainings, and fained skirmiſhes, for feare of danger, that might thereby enſue among themſelues. But now and then after their training, to take euery ſhot ſingle, and to ſee him charge his peece orderly with pouder and bullet as aforeſaid; and hauing a great but erected to that purpoſe (the which ought to be in euery hundred or Baily-wicke) to cauſe them to leuell, and diſcharge at the blancke thereof, orderly one after another: encouraging thoſe which do make the faireſt ſhot.

Aduiſe. *How to bring the biſognios fir ſt to the bullet.*

Now for the Pike, which the Spaniards do tearme *Señora y Reyna de las armas*, the Queene and miſtreſſe of weapons. The ſouldier which carieth the ſame, is to bee well armed with a good corſlet, furniſhed with his gorget, Morion, taſſes, pouldrons, vambraces, and gauntlets alſo; to be armed as he ought to be; whatſo-

The piker his armings and weapon

euer

euer opinion other men may hold to the contrary, ſuppoſing a bare payre of *Cuyraſſes* onely ſufficient: but I am of opinion, that the armed *Picquier* ought to bee armed in all points (as I haue ſaid) for defence: and then to offend, to be weaponed with a good Pike of ground Aſhe, of ſeuenteen or eighteen foote long at the leaſt, well and ſtrongly headed, with the cheekes three foote long, or there about: and for other weapon, to weare a good ſhort ſword and dagger: for the dagger is a weapon of great aduantage in Pell mell.

The pike of 17. or 18. foote.

The dagger.

Obiection.

Anſwer.

And if it be replied, that the ſouldier ſo heauie armed, is not for any great march, or ſpeedy execution; I ſay, that among well ordered Regiments, there are alſo yet ſome vnarmed pikes, that is without any corſlet, or, at the moſt, the bare cuyrats onely and morion, the which the *Italians* do call *Picche ſecche*. Now theſe are reſerued & imployed in ſuch peeces of light ſeruice. And the *Picquier*, either armed or vnarmed is to be ſhewed and taught the carriage and vſe of his pike; as firſt to tertiar or carry the ſame orderly vpon his ſhoulder, holding the ſame with his foure fingers vpon the vpper part of the ſtaffe, & his thombe vnder the ſtaffe, neare vnto his ſhoulder, baſing downe the blunt end thereof, to aduaunce the point, and poizing the pike with an equall poize vpon his thombe and ſhoulder, alwayes in march keeping the lower end of his pike on the one ſide of his foremans legge ſtill aduertiſing that in march the pike is to be carried vpon the right ſhoulder, of euery ſouldier throughout euery file, ſauing the vtmoſt file on the left ſide of the arrayes or ordinances, which are to carry their pikes vpon their left ſhoulders onely, alwayes regarding how thoſe of the foremoſt rankes doe carry their weapon, the reſt to do the ſame throughout euery ranke and file following: for order and forme do require the ſame. Next hee is to be taught how to plant his pike on the ground, at any ſtand or Alto: then how to arbolare or aduaunce his pike, that is; to reare his pike vpright againſt his right ſhoulder: and with his right hand ſtretched downe vnto his thigh, to hold the ſame neare vnto the but-end betwixt his foure fingers and his thombe, ſtretching his forefinger downeward vnto the but-end of his pike, and ſo aduaunce the ſame vpright & high againſt his right ſhoulder, reſting and ſtaying the ſame with his right hand againſt his right thigh and knee, as before is ſayd. Now this is to be done at ſuch times, as being brought into a Ring, and ſerreyng cloſe ſhoulder to ſhoulder, then to aduaunce their piks in this ſort at the encloſing thereof, & ſo to continue vntill they fall out of the ring againe into a larger march. Alſo the ſame is vſed by ſome, at their arriuing vnto the corps de guard, at the ſetting of the watch before their chief Commander or officer; euen as the firſt ranke ſhall arriue into the corps de guard, ſome ten or twelue paſes from the place of their ſtand; to arbolare their pikes; and ſo rancke after ranck, carrying them in the ſame order vntill they come vnto their place of ſtation, there to make Alto, and to plant their pikes vpon the ground, as the ſquadron is formed. But principally, the ſouldiers marching in ſquadron, and vpon point to come to the puſh of the pike with their foote enemy, then are they firſt to aduaunce their pikes, as is ſaid, bearing the ſame orderly with the right hand againſt the right thigh, and the left hand aboue neare about the ſhoulder, and ſo to charge vpon the left hand and puſh, ſtanding firme and ſure vpon the left foote. But if the ſquadron be charged with any troupes of the enemies horſe, then muſt the *Picquiers* cowch their pikes faſt vnder the right foote, holding

To make Alto, to arbolare, or aduaunce.

To reare.

When to aduaunce.

To preſent, To charge.

To puſh.

To cowch.

ding the same fir[illegible] the left hand, and bow downe the point thereof against the breast of the horse, hauing his right hand ready to draw his sword, if occasion shall be offered. *To Couch.*

Now how necessary and auayleable this continuall vse and practise is, may easily be gathered from the sundry victories of the auncient *Romanes*. Who both in their Campes and Garrisons had their *Tesserarios* (which were as our Sergeant Maiors) to ensigne and teach their people of warre the vse and managing of their armes, at all idle and vacant times. The old souldier, sometimes once in a day, and the *Tirones*, which we terme *Bisognios*, or new souldiers, twise in the day, or as occasion serued: so were their people alwayes ready and perfect. And againe they did not onely practise them in the knowledge of their weapons, but many times also did conduct their Companies for their recreation into the field, there causing them to run, to leape, to iumpe, to wrastle, to throw the sledge, to pitch the barre, and such like exercises; and sometimes also to learne to swim, as a qualitie very befitting a souldier. Moreouer, they did many times cause their souldiers, as well foote as horse, to march armed at all points, euen as it were to serue against their enemie, once or twise in a moneth, euery man carrying his owne prouision and victuals, and giuing and receiuing the charge, euen as in hostile fight: and this did they for the space of ten miles, fiue out, and fiue home. Thus with these exercises they brought their people to be able, quicke, and ready to serue vpon all occasions, and did more good seruice with twentie thousand of such so trained and practised, then with thirtie or fortie thousand of raw and vntrained men: But to haue a souldier to be very perfect, and a good executioner indeede, it is needfull to haue bin in some good peeces of seruice, & to haue seene men to fall on both sides, which doth flesh & harden a souldier very much. Finally the good Picquier ought to learne to tosse his pike well, with the due handling of the same, and to be skilfull therein; sith it is the weapon he professeth: for 100 of ready pikemen, are better then 200 that know not the vse of the weapon. Now the halbarders ought to be fully armed with a corslet as is the Picquier; but in marching he is alwayes to beare the same on the right shoulder, holding the lower end thereof, with his right hand almost close to his right thigh and knee.

The Romains Tesserarios their training.

Vertuous exercises.

To march out fained skirmish.

Ready men, aduantagious.

To be a good executioner must haue seene seruice.

To tosse the pike.

The halberd.

Gent. You haue well discoursed touching the caryage and handling of the calliuer, musket, pike, and halbard. But now, I pray what meane you by doubling your ranke and file?

Capt. By ranke I meane euery row, or order of men, standing shoulder by shoulder, either in march or squadron, reaching a long from the one side of the squadron vnto the other. And by file, I vnderstand all the line, order, or row of all the souldiers standing consequently one after another, from front to the traine, either in march or squadron. Now, the doubling of ranke or file is thus. First suppose your company to be of 100 pikes (as for the shot we will speake of hereafter) and you would bring them into a iust square of men: first search out the *Cubike* roote of your number, and it is 10; then (after the first order) you shall cause them by the sound of the drum, to embattell, to march vp in single files, at 10 men in euery file, & the head man of euery 10 to be a Caporal or *Cabo de Camera*; and as the first 10 is come vp vnto the place where you meane to frame your squadrõ, cause them to make Alto; then cal vp the second file, at 10 *per* file, causing

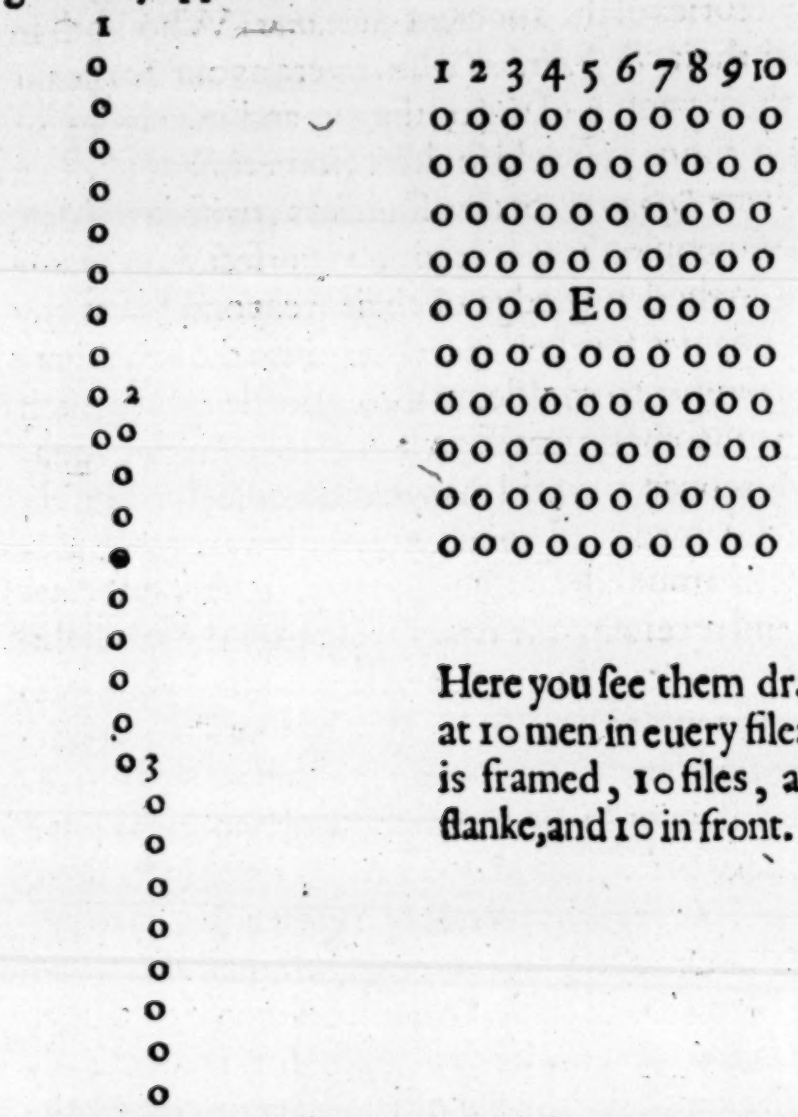
Ranke what it is.

File what it is.

The doubling of ranke and file.

By single file.

them to march vp cloſe pouldron to pouldron of the firſt tē, and there to firme & ſtand: then the third file, then the fourth and ſo conſequently the reſt, vntill your ſquadron be formed: your enſigne marching vp in the middle file, as in this figure may appeare.



Here you ſee them drawne vp in ſingle files, at 10 men in euery file: and ſo your ſquadron is framed, 10 files, and 10 rankes or 10 in flanke, and 10 in front.

By maniple or many files.

An other order is thus: you may march them vp in 2, 3, 4, or 5, files at once, and 10 rankes (for the number euen or od importeth nothing) if at 2 files at once, then are they marched vp and framed at fiue commings vp: if at 3 files at once, then at three marchings vp at 3 files *per Maniple*, which make 9 files, and 1 ſingle file, at 10 men *per* file: which maketh your iuſt ſquare of men. Now if you will march them vp, by 4 files at once, they are 2 marchings or *Maniples*, at 4 files, 10 rankes, and one *Maniple*, at 2 files *per Maniple*, and ſo againe is your ſquadron formed. And againe if you would march them vp by 5 files at once, and 10 rankes, they come vp in 2 *Maniples*, and ſo is your ſquadron iuſtly framed.

How to double the ranke.

Your ſquadron being thus framed & ſet, at 10 rankes, & 10 files, thē to double the rankes, you ſhall cauſe vpon an other ſound of the drum, thoſe of the ſecond ranke, to ſtep in betwixt them of the firſt ranke, beginning either vpon the left or right hand firſt, as you will: and the 4 ranke to double the 3, and againe the 6 ranke to double the 5, and the 8 ranke to double the 7, and finally the 10 to double the 9, ſo ſhall your battell or ſquadron come to be 20 in breadth, and 5 in length or depth; or 20 files and 5 rankes, which is in forme of a battell of double front as by theſe figures appeareth.

The

The ſquare of men. *The ranke doubled.*

Ranke. *Ranke.*

1 0 0 0 0 0 0 0 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

2 0 0 0 0 0 0 0 0 0 0 2

3 0 0 0 0 0 0 0 0 0 0 3 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

4 0 0 0 0 0 0 0 0 0 0 4

5 0 0 0 0 0 0 0 0 0 0 5 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

6 0 0 0 0 0 0 0 0 0 0 6

7 0 0 0 0 0 0 0 0 0 0 7 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

8 0 0 0 0 0 0 0 0 0 0 8

9 0 0 0 0 0 0 0 0 0 0 9 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

10 0 0 0 0 0 0 0 0 0 0 10

file. *file.*

Here you ſee the rankes doubled into 20 files and 5 rankes. Then cauſe them vpon another ſound of the drumme, to fall off, or backe againe into their former places: and ſo to double againe vpon the other hand, and fall off againe. Now, to double the file; cauſe the ſecond file to double the firſt either vpon the left or right hand, as it ſhall pleaſe you to begin, and the fourth file to double the third, and the ſixt the fift, and the eight the ſeuenth, and the tenth file to double the ninth, as in theſe figures following may appeare.

To fall off.

To double the file.

The ſquare of men.

1 2 3 4 5 6 7 8 9 10

1 0 0 0 0 0 0 0 0 0 0

2 0 0 0 0 0 0 0 0 0 0

3 0 0 0 0 0 0 0 0 0 0

4 0 0 0 0 0 0 0 0 0 0

5 0 0 0 0 0 0 0 0 0 0

6 0 0 0 0 0 0 0 0 0 0

7 0 0 0 0 0 0 0 0 0 0

8 0 0 0 0 0 0 0 0 0 0

9 0 0 0 0 0 0 0 0 0 0

10 0 0 0 0 0 0 0 0 0 0

Fronts Rankes.

1 2 3 4 5 6 7 8 9 10

1 0 0 0 0 0

2 0 0 0 0 0

3 0 0 0 0 0

4 0 0 0 0 0

5 0 0 0 0 0

6 0 0 0 0 0

7 0 0 0 0 0

8 0 0 0 0 0

9 0 0 0 0 0

10 0 0 0 0 0

11 0 0 0 0 0

12 0 0 0 0 0

13 0 0 0 0 0

14 0 0 0 0 0

15 0 0 0 0 0

16 0 0 0 0 0

17 0 0 0 0 0

18 0 0 0 0 0

19 0 0 0 0 0

20 0 0 0 0 0

files doubled.

And here you may ſee the file doubled, reduced into fiue files, at 20 men *per* file, vpon the right hand: the like you ſhal cauſe them to do vpon the left hand: hauing firſt cauſed them to fall off from their file, bringing them into their former ſquare againe.

To turne their faces and make front of any part

Then ſhall you go vnto the traine of your battell or ſquadron, and vpon another ſound of the drumme, you ſhall command all your ſouldiers to turne their faces vpon a ſudden towards you: then cauſing them to double both ranke & file that way, as you did the other way before: thus with a litle paines taking and practiſe, you ſhall ſoone bring your ſouldiers to be ready and skilfull in theſe alterations of formes, and many more. The like may be done with any other greater numbers, either in battels or battallion, or by making the front of any flanke.

Gent. But to what end ſerueth all this?

Doubling of ranks and files ſerueth to ſundry purpoſes.

Capt. Marie, to many good purpoſes: For the firſt order of doubling the ranks (beſides the readineſſe it breedeth in the ſouldiers) doth ſerue to alter vpon a ſudden your grand ſquare of men, into a ſquare of ground, or into a battell of double front, and to many other purpoſes, in framing of many ſmall battallions one grand ſquare. And againe, the ſecond order in doubling of the files, doth ſerue to many ſuch other purpoſes: as if vpon a ſudden your foot enemy ſhall come to charge you vpon the flanke, then by doubling their files, and ſuddenly turning their faces vpon the enemie, they ſhall make of flanke the front, and ſo bee ready with double hands, either to receiue or giue the charge. For thoſe battels of ſquare of ground, or battels of double fronts, do bring many hands to fight at once: being verie aduantagious for footmen againſt footmen, as reaſon and experience proueth and ſheweth.

To paſſe ſtraights

And againe, if you draw or diuide your battell or battallions into maniples, to march through ſtraights or narrow paſſages, this order of doubling the files is verie ready and auaileable, as thus. If your battel or ſquadron be of 5184 pikes, whoſe ſquare roote is 72: now your paſſage will permit but 8 men to march in front; then muſt you diuide your ſquare root 72 by 8, ſo commeth it to be 9 maniples of 8 men in rank or breadth. And ſay yet againe, that the ſtraight or paſſage doth fall yet more narrow, or ſtraighten leſſe, then to containe 8 men in front, the cauſe euery maniple, at the verie entring of the ſtraight, to double their files, and ſo of 8 you ſhall make 4 files per maniple: the which being ſhouldred vp cloſe together, will containe no more roome in breadth then the 8 did before. And hauing paſſed the ſtraight, cauſe them to fall into their former proportion, and ſo maniple after maniple in paſſing the ſtraight.

Gen. But if the ſquadron or maniple were of od nũbers, it wold not ſo fal out.

Od files or ranks.

Capt. That importeth not: for the od file or rank which reſteth vndoubled, may in paſſing of the ſtraight, cloſe vp ſhoulder to ſhoulder vnto the reſt, obſeruing their proper ſtations in files; and if the paſſage will not permit that, then to fall backe after the traine of their maniple, & hauing paſſed the ſtraight, to ſleeue vp in file, pouldron to pouldron of their fellowes, and ſo to fall into their former proportion. The like of any other od numbers may be done with very great facility.

Now, for as much as I entend to frame both figures and tables of ſundry ſorts of battels and battallions, in our diſcourſe following, I will at this inſtant bee the more briefe; ſuppoſing this, at this preſent to ſuffice. For he which conceiueth and

vnder-

vnderſtandeth this well, may do the like with any other numbers great or ſmall.

Gent. And what courſe do you appoint the ſhot belonging to thoſe numbers of pikes, to obſerue in theſe alterations of proportion?

Shot, how to be practiſed.

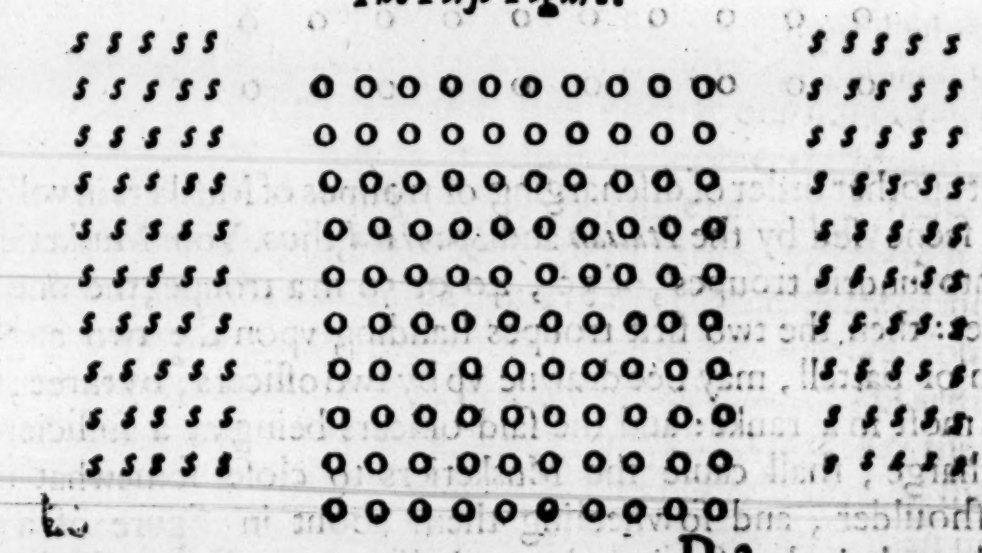
Capt. The ſhot appertaining vnto euerie ſuch number, may be practiſed in the like or ſemblable ſort, either alone by themſelues, or placed in two grand ſleeues along by the flanks of their ſquadron or battallions. As for example: If vnto the former number of 100 pikes, there were proportioned & ſuted 100 ſhot, calliuer and musket, theſe would I draw out into 5 *per* rank, which would make 20 ranks. Thoſe 20 ranks would I cut off or deuide in the middeſt, ſo ſhould I haue 10 ranks for to ſleeue the one flanke of the battallion, and 10 ranks for the other flanke, at 5 men per ranke, or 5 files in euery ranke, which is all one. Theſe 2 ſleeues being placed, may be doubled with the pikes by ranke or file, for practiſe ſake only. But if you were engaged to fight with the enemie, I would wiſh all great ſleeues of ſhot to be deuided into many ſmall troupes, the one ſtill to ſecond another: as hereafter ſhall be declared & ſhewed. And lo here another order: the 2 grand ſleeues being al musketiers, as the battell or battalliō doth aduance & march on toward the enemy, & comming once within reach of the musket, then the firſt ranks of theſe ſleeues of muskets many diſcharge in marching in this ſort. The firſt ranks ſtepping ſome two or three pacesforward, & there thoſe of the right ſleeue to ſtepone halfe pace toward the right hād, & thoſe of the left ſleeue, one half paſe toward the left hand, hauing in the meane ſpace made themſelues ready, and cocked their matches, then with readineſſe & expedition all thoſe of thē firſt ranks, their muſkets being vpon their reſts or forks, to diſcharge at once, and keep their ſtation, & charge againe, permitting other rankes to proceed before them. Then preſently thoſe of the ſecond ranke to ſtep vp iuſt before the firſt rank, as the battell or battallion marcheth, and ſo to diſcharge as their former fellowes had done before: & then the 3. rank before the 2. & the 4. before the 3. and ſo all the other ranks conſequently with this kind of double march: and at the traine of the laſt rank, thoſe of the firſt to follow vp againe: and ſo conſequently the reſt. But if it chance their ſquadron of pikes to be diſtreſſed, & forced to retire, they are to diſcharge at the enemy, retiring backe, vpon a countermarch, as theſe figures following ſhal plainlie denote vnto you the maner and order.

Example.

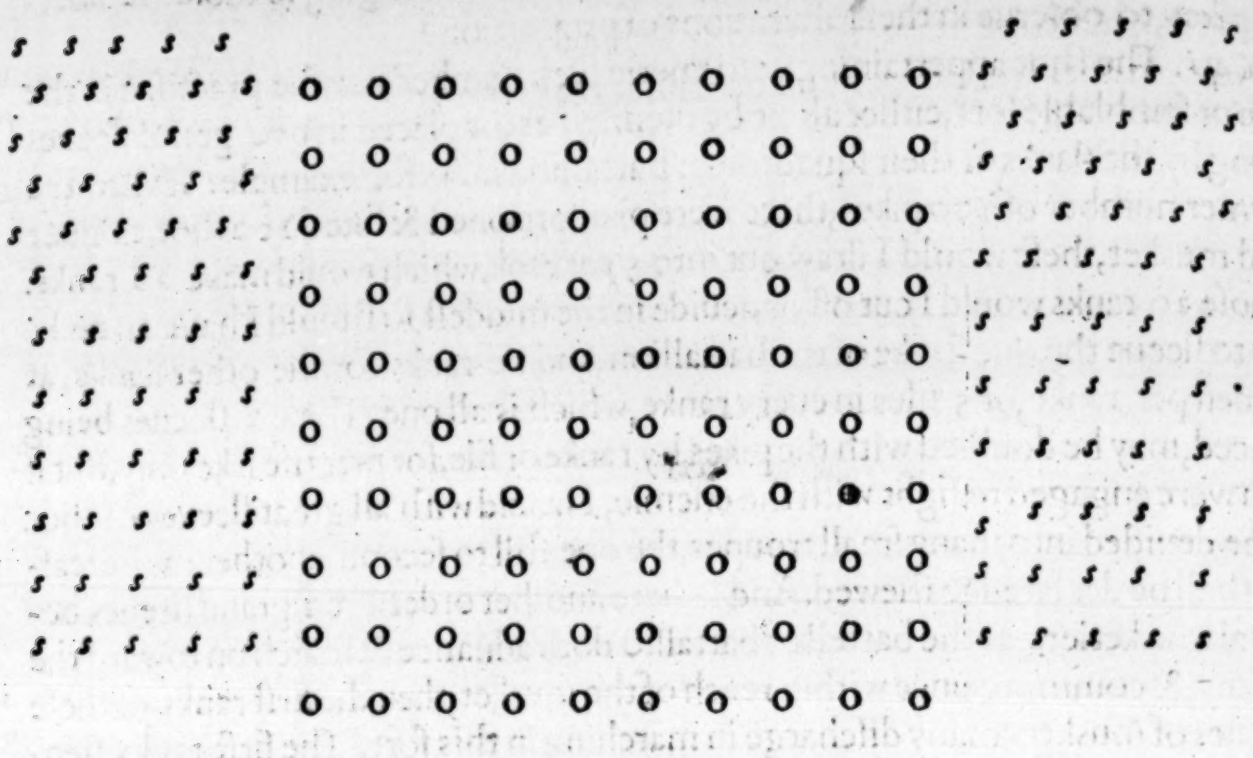
Musketiers, how to diſcharge vpon a march.

How to diſcharge vpon a countermarch.

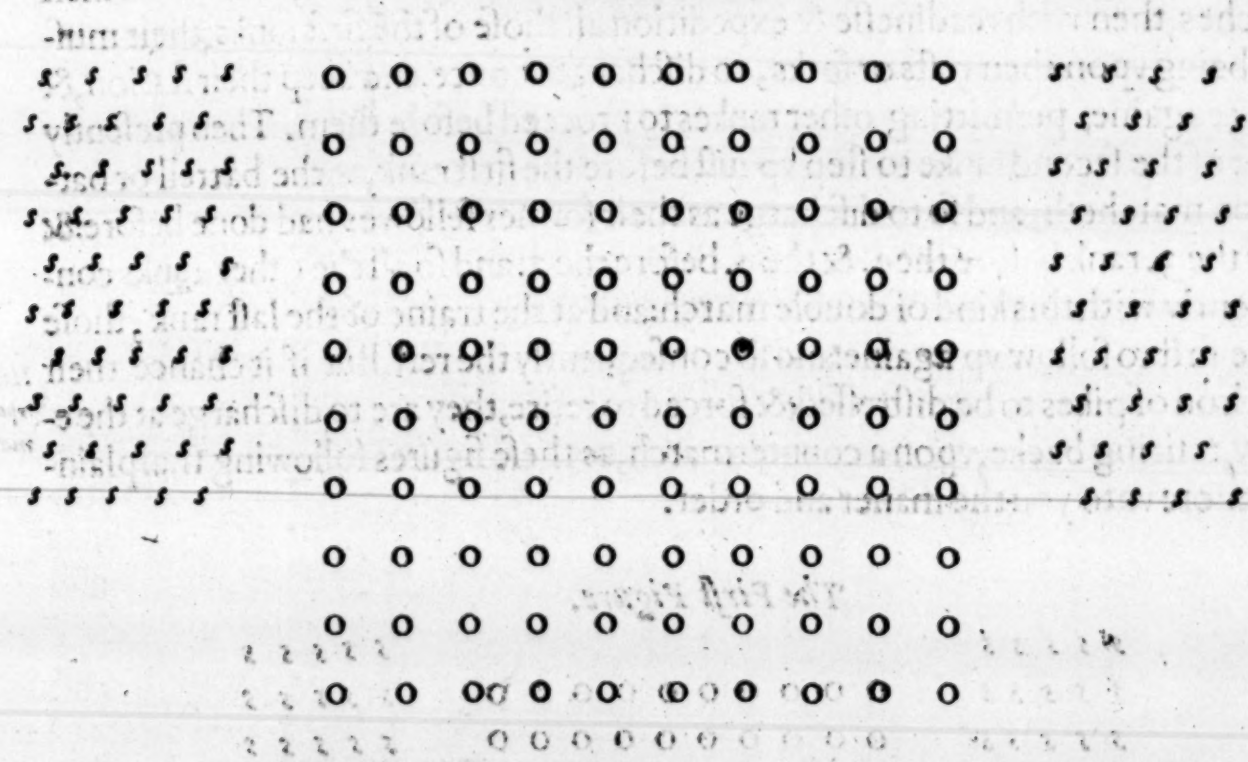
The Firſt Figure.



The ſecond Figure with the Muskets diſcharging in marchings.



The third Figure vpon the retrait, the shot diſcharging vpon a Counter-march.

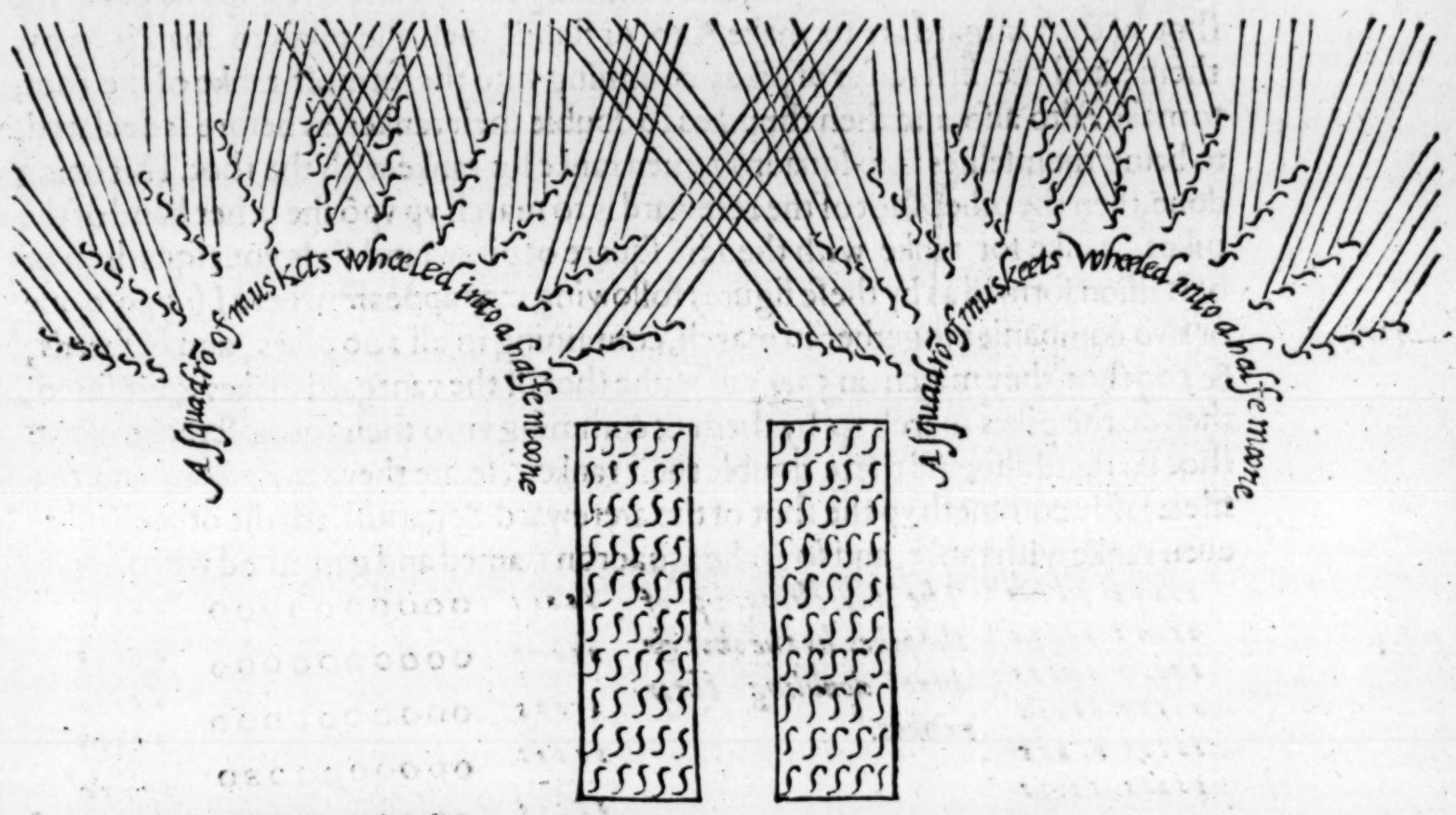


Musketiers wheeled into a halfe moone to diſcharge in vollie.

There is yet another order of diſcharging of troupes of Muskets in vollie, the which I haue ſeene vſed by the *Italian* and *Spaniard*, thus. Your Musketiers being deuided into ſundrie troupes, of 30, 40 or 50 in a troupe, the one to ſecond the other: then the two firſt troupes ſtanding vpon the two angles of your ſquadron or battell, may bee drawne vp by two officers, by three, foure or fiue at the moſt in a ranke: and the ſaid officers being at a ſufficient diſtance to diſcharge, ſhall cauſe the Musketiers to cloſe ſomewhat neere, ſhoulder to ſhoulder, and ſo wheeling them about in figure of a halfe Moone, ſhall at their due ſemi-circle, or halfe compaſſe, cauſe the Muſ-

kettiers

ketiers to make Alto; and clapping their muskets on their rests, close one by an others shoulder, and each one hauing a care to his forefellowes, they shall at one instant, discharge altogether at one vollie vpon the enemy, and so retire, giuing place to other troupes: the maner and forme whereof shall by these figures following appeare.



Troupes or squadras of muskets at 50. per troupe 5. in ranke.

Gent. Your calliuers or small shot, would you haue them to discharge in these maners and orders before spoken of and figured?

Capt. No; but I would wish the calliuers or small shot to be deuided into sundry small troupes, of 20, 30, 40 or 50 in a troupe; and by their seuerall officers to be led vp, and to skirmish in single file, discharging readily one after another in file, and so wheeling about vpon the left hand, to retire, giuing place vnto others to second them, and to fall into their forme of troupe againe; and then recharging aduisedly to be ready to come vp to second others, as their turne commeth; of which maner of small troupes, shall often in our discourses following, be denoted and shewed. Now to conclude these orders of training, I will set downe one point more to be obserued by one single company, or two, or three companies ioyntly comming into the Corps de gard to their watch, reseruing many other particular matters vntil I come to treat of the office of the Sergeant Maior, where many Militarie points shall be at large discoursed. You must note that euery single company marching & training alone, their pikes are first ranked by 3, 4, 5, 6 or 7 or more in a rancke, according to their number (the number of euen or od, in ranke importeth nothing, as I sayd before) hauing their ensigne, and halbards contained within the center or middle ranke of their pikes. Then the shot is to be ranked altogether with the like number of men in a ranke, and

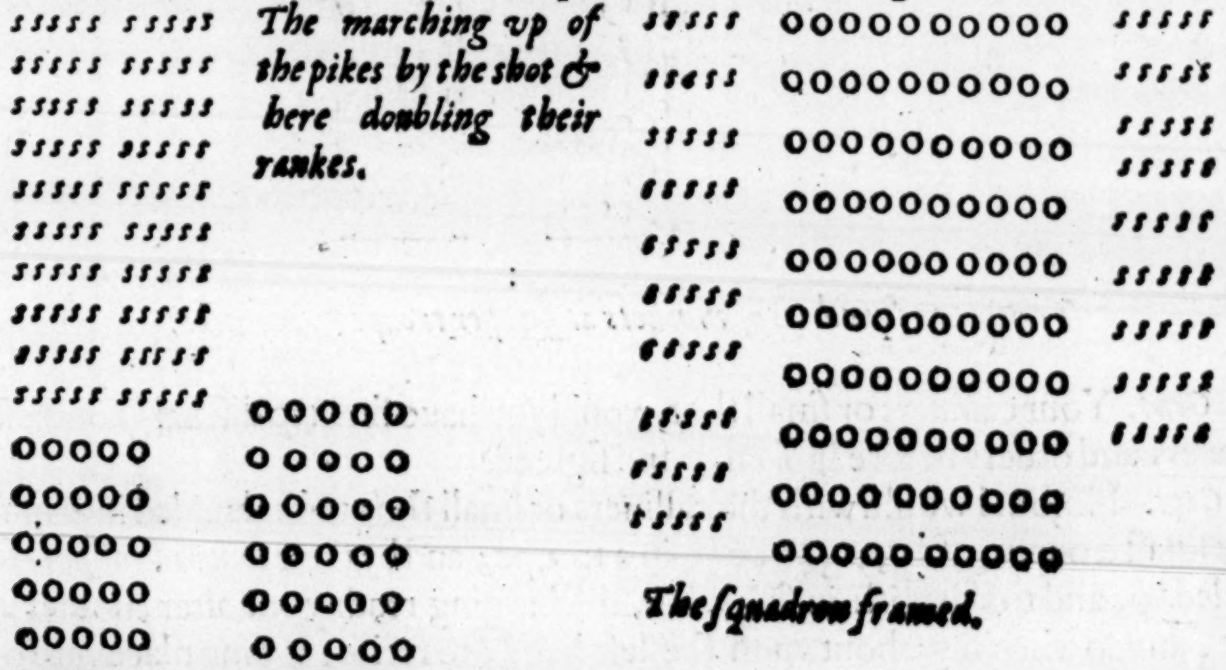
Calliuers deuided into small troupes to discharge by file.

The arraunging of a small company to march.

then to cut them off, or deuide them at the middle ranke; leading the one halfe of them vnto the forefront of the pikes, and there to place them in euen files with the pikes, and the other halfe is to be brought vnto the traine of the pikes, and there filed in like maner, alwayes regarding to place the muskets of the first halfe of your shot, in the formost rankes, and those of the other halfe, in the hindermost ranke. Now thus marching on, and comming to the place of Corps de gard, the shot of the vantgard are to make Alto, or stand, then the pikes to march vp by, them; and the first ranke of pikes comming vnto the formost ranke of the shot, to make Alto also, and then the pikes to double their rankes, as before is declared, to bring themselues into squadron, euen ranke for ranke with the shot. This being done, then the other shot of the rereward is to march vp vpō the other hand of the pikes, ranke for ranke with the said square of pikes: and so is your squadron or battallion formed as by these figures following may appeare; where I suppose one or two companies together in march, containing in all 100 pikes, and halberds, & 100 shot, they march on 5 *per* ranke; the shot of the vantgard makes their stand, then do the pikes march vp by them, & comming vnto their formost ranke of the shot do stand also; and there double their rankes, so are they 10 rankes, and ten files: lastly commeth vp the shot of the arereward & garnisheth the other flanke, euen ranke with ranke, and so is the squadron framed and garnished with shot.

Order to be obserued entring into the Corps de gard.

The march.



Thus

Thus me thinks that I haue ſufficiently intreated of this order of training, as for other ſortes of imbattailing we will hereafter ſpeake of, as occaſion ſhall be offered.

THE SECOND DIALOGVE.

VVherein is declared of quadrat battels, both of men and ground: opinions tocuhing the mingling of short weapons with the pikes, and lyning of battells with the ſame confuted: the framing of battels of pikes in three ſorts: the placing of ſhot about the batell, with the places of the horſe and artillery.

Gentleman.

THen I pray paſſe to your other officers of warre.

Capt. There be many petie officers vſed amongſt vs, as Clarke of the band, Drummer, Forrage maiſter, Scout maiſter, Trench maiſter, Quarter maiſter, Caporals of the field, & ſuch like, of whom I will ſpeake particularly nothing; but including them vnder the charge of other ſuperior officers: of the which I will begin with the duty of a Sergeant Maior, whoſe office is of ſuch importance, care, induſtry and skill, eſpecially in day of battell, that I muſt be conſtrained before I enter into the parts of his office, to deſcribe the orders of fights and battels moſt vſed in theſe our moderne wars, as a thing moſt pertinent vnto the aforeſaid officer, touching the ſundry formes of battels vſed by antiquity; wherein (in mine opinion) the Romaines did moſt excell: I will ſpeake, at this inſtant, litle more then what is ſayd before, conſidering that ages, times, occurrents, inuentions and cuſtomes haue altred, and dayly doth, what antiquity thought beſt and beſt aſſured.

The formes of battels in our time are not many, yet euery man almoſt hath a ſeuerall opinion thereof; but common reaſon and experience hath made moſt men confeſſe and agree, that of all formes the ſquare battell, be it either of ſquare of men, or ſquare of ground, is the moſt aſſured, moſt ſtrong, and moſt apt to bee reduced into any other forme.

Gent. What meane you by this word Battell?

Cap. By the word Battell, I vnderſtand in this place a whole vnited body of ſouldiers well diſciplined, all armed with pikes, to fight in day of battell, an act of armes, with good hope of victory, the which for more ſecurity hath the front, the traine, and the two flankes of complet corſlets, to the end that being aſſayled or charged, they may make the face or front of any or euery ſide or part; and valiantly receiue the charge, and may alſo charge and breake the enemy, and attaine the victory. Now in this body I vnderſtand neither the ſhot, nor cauallery, the which are to haue an other order to another end.

The cauallery & ſhot, not contained within the body of the battell.

Gent. Are theſe battels framed in one ſort onely, or in more, or in many, or in how many; or what maner I pray are they made?

Capt Your curious demand deſerueth anſwer, I tolde you before that many ſorts of battels haue beene framed by valiant and expert Captaines: but the beſt approued, and moſt vſed now, is the ſquare battell, be it either of men or ground.

Gent. I would gladly know the reaſon why they make their battels ſquare; and what is meant by ſquare of men and ſquare of ground.

The reaſons why battells are framed in quadrat proportion.

Capt. Battels are made ſquare, & ſo vſed, for that they are apt to frame the Front of euery ſide or part, which could not be if they were Triangles, or of any other forme vſed by antiquitie. And it doth much import that the Front be gaillard and ſtrong: for the front once broken, the battell ſtands in hazard. And againe, to ſerrie or cloſe Pouldron to Pouldron the ſquare forme is beſt: for that they cloſe equallie together, & ſtrengthen the front to the victorie. And this ſhall ſuffice touching the Quadrat. Now, concerning the difference of ſquare of men, and ſquare of ground, I ſay: that the ſquare of men is, when there be ſo many men in front as in flanke, or ſo many in length as in breadth; and this ſort of battell commeth to bee in ground two times, and one third more long then broade, and a Quadrat of ground will bee of men two times and one third more broade then long.

Square of men, & ſquare of ground, what it is.

Gent. In how many maners may theſe ſquare battels be made?

Capt. Were the Companies all of pikes, with corſlets complet and not mixt with bare pikes, (which is not lightly to bee found) the framing of any of theſe ſorts of battels would be very ready and eaſie, and might be ſoone brought into any proportion without confuſion: the which being of pikes armed and vnarmed, will require more care, labour, and paines, to the framing thereof. Now therefore I ſay, in three ſorts or maners, moſt auaileable and moſt commodiouſly are battels framed in theſe dayes, conſiſting of armed and vnarmed pikes.

Battells conſiſting of armed and vnarmed pikes, framed in three maner of wayes.

1 The firſt manner is when an army doth march with the one halfe of the armed pikes in the foreward, and the other halfe in the reareward of the vnarmed pikes. Now in the body of this battell I vnderſtand no ſhort weapon, (but reſerue them to another place and vnto another purpoſe, as before I haue ſayd, and will heareafter ſpeake more thereof) but all pikes, for the battell thereby wold be more readily framed, more brauer in ſight, and more ſtronger to fight, in mine opinion.

2 The ſecond faſhion is, when the army marcheth company by company, with their armed pikes in the foreward and reareward of euerie particular companie.

3 The third order is, when an armie marcheth *Maniple* by *Maniple*, with the armed pikes in the Front and traine of euery particular *Maniple*. And beſides this, when the armed pikes which do ſerue to arme the two flankes, do march the one part before, & the other part behind, and theſe alſo are called *Maniples*: for a *Maniple* is here called ſo many rankes throughout the battell, as the battell is in length, at ſo many *per* ranke as they march in ordinance or array. And although the armed pikes which doe march at the head or taile of the arrayes of *Maniples* to arme the two ſides, if it happen at any time that they march not to the full length of the battell, yet neuertheleſſe when they be put vnto their office to arme the two ſides, although they be not in length to the length of the battell, at ſo many in rank as is appointed to arme the two flankes, yet are they called *Maniples* alſo. And againe, any part of ſhot or pikes, that be drawne a part, to be ſet to defend any ſtraight, or to ſcarmuſh, may alſo bee called a *Maniple*: but being

Maniple, what it is.

being ſhot, are fitter called troupes, after the french word.

Shot in troupes.

Now of theſe ſundry ſorts of imbattailling of men, as well of proportions of equality as of inequality, and of battallions of the ſame nature, as well euen as odde battallions, ſeruing to the framing of croſſe battels with ſuch other like, I will frame certaine calculations or tables, the which ſhall ſerue to ſundry numbers of men & orders, according to the iudgement of the skilfull ſouldier, which ſhall be in the laſt booke of theſe diſcourſes.

Gent. But me thinkes you are not much affected to haue any halberdes or billes in your battell, which is contrary to our opinion and cuſtome: for we call them the gard of the enſignes, and ſlaughter of the field.

Capt. Truly, I would not wiſh any ſuch weapon in the body of a ſtanding battell, if we might be prouided otherwiſe of pikes: my reaſons are theſe. For the pikes being Terciard or charged ouer hand to encounter a battell of footmen, or couched vnder the foote to receiue any troupes of horſe, do one of them fall ſo proportionally within or after another; euen as their rankes of men are diſtant in their ſeuerall ſtations, the ſecond following the firſt, the third the ſecond, and the fourth following the third, and ſo conſequently euery ranke ſeconding one another, that it ſeemeth it were as good for a man to come vpon a braſen wall (if they ſtand reſolute) as vpon ſuch a battell of pikes, except they ſhould be marched or encountred with the like weapons and proportions. Now if this be the beſt courſe to receiue or charge footmen, then no doubt (not being thus mingled with ſhort weapons) it muſt needes be the beſt battell to receiue a charge of horſe.

Halberds and ſhort weapon not liked of in the body of the battell. The reaſons why.

Gent. Although you diſalow and diſproue to haue your battell of pikes mingled with ſhort weapon; yet would you not alow them about the enſignes in the center of the battell?

Capt For what purpoſe in the center of the battell?

Gent. To defend the enſignes with hand blowes.

Cap. I ſuppoſe it an error. For who doth not know that if the enemy be like to be victor, the armed pikes will yeeld backward as they feele themſelues diſtreſſed, ſo as when the pikes are in ſuch maner craſhed and cluſtred together, that they can no longer charge and puſh with their pikes, then will the throng or preſſe in the center be ſo great, that the halberds and bils ſhall haue little roome to ſtrike; nay ſhort ſwords will hardly haue rome at that inſtant either to thruſt or to ſtrike. I would thinke daggers would do more execution at that time, and in that preſſe vntill one ſide fall to flight: ſo I ſee no reaſon at all for halberds or bills to haue place in a battell or ſtand of pikes: Beſides the vnſeemely ſhew they make either by themſelues in the center, or mingled among pikes.

Halberds not liked of about the colours. The reaſons why.

Daggers auailable in pell mell.

Short weapon in a ſtand of pikes vnſeemelie.

Gent. So I perceiue you would quight exclude all halberds and bils out of your battell, and ſo not at all to be vſed.

Capt. Conclude not ſo ſhort vpon me, becauſe I giue them no place within the body of the battell. For if you remember, in our former diſcourſes, at the equall ſortment of weapons, I allowed to euery hundred of men 8 or 10 halberds. The which bils and halberds with other ſhort weapons as ſwords and targets, and long ſwords, and ſuch like, ſhall ſerue as in a place of beſt ſeruice for them, to mingle with your naked troupes of ſhot, and alſo (placed with ſome pikes) for

Short weapon their places of beſt ſeruice.

the gard of the cariage and munition and ordinance, or for execution if the enemy begin to breake and flye, with ſundry ſuch ſeruices not contained in the body of the battell.

Gent. Well, you haue ſatisfied vs herein; but what thinke you of ſundry other opinions touching the lining of battels with ſhot or bowes?

Lyning of battels with ſhot or bowes diſliked.

Capt. Touching ſuch lining I will ſhew you mine opinion againſt them. Now firſt for that kind of lining which is vſed in placing a pike and a ſhot, I am ſure that the ſhot cannot be ſo hurtfull to the enemy, as they will weaken the battell: my reaſon is this. No army, I am certaine, ſhall be ſo ordered, that the battell ſhall be left bare without his troupes of ſhot before, to keepe the enemy doing in skirmiſh, vntill the battels be ready to ioyne, and charge or couch their pikes: at that inſtant haue the ſhot, that line the battell, their time to ſerue, euen as the pikes are couched, and not before. Now let men of conſideration and experience iudge, whether it be poſſible for them to diſcharge aboue one ſhot a peece, and that not aboue three rankes of them; and thereupon, whether thoſe ſhot can at that time of ſeruice be ſuch a ſtrength to the battel, as if an armed pike were in the roome. I do ſuppoſe the battell would be much ſtronger, if the ſhot were rid from thence, and pikes in their places. Then it falleth out, that this kind of lining is not good. Now, touching another kind of lining with ſhot, which is 3, 4, 5, 6, or 7, rankes of pikes; and then 3, 4, or 5 rankes of ſhot, and then pikes, and then ſhot againe. In deede this kind of lining is the moſt tollerable, and yet not without his diſcommodities: for if ſuch a battell ioyne with a battell of foote, the ſhot cannot play vntill the rankes of pikes before them are broken; which cannot be, but that their owne men and their enemy ſhall be mingled pell mell one among another. Then tell me by reaſon, how thoſe ſhot can ſerue that are the lining, but they muſt needes kill as well their owne men, as their enemy, being thus mingled at all aduentures. And if this be the end of their ſeruice (as indeede it is) by a forced neceſſity to kill without choiſe, then muſt it needes follow, that they are rather hurtfull then ſeruiceable in that place: farre better therefore pikes in their romes.

Lyning of ſhot in ſingle ranke.

The reaſons.

Lyning with ſhot in another ſort more tollerable.

Lyning with bowes, a comberſome tying weapon.

And now for your lining with bowes, a comberſome tying weapon in a throng of men; it muſt needes bee concluded by reaſon, that where calliuers, which are no tying weapons, are yet vnprofitable, in that place how can bowes, to which it requireth ſuch elbow rome, and are ſo troubleſome, be any wayes in that ſort commodious or to be allowed?

Gen. Your reaſons and concluſions haue wonderfull well liked vs; wherefore now I pray returne againe to your framing of battels of pikes only, without ſhort weapons.

Capt. I told you before, that battels are made moſt auaileably, and moſt commodiouſly, in three maner of wayes: ſhewing you euery ſeuerall order, and that when time ſhoulde permit, I would frame tables for the eaſie ordering of each.

Gent. But ſhall your tables ſerue for the framing of one whole bodie of a battell, or for more?

Tables to be framed, and to what end.

Capt. Theſe tables ſhall ſerue to make either one, two, or three battels of an army, or ſo many as ſhall be requiſite and needefull, either to offend the enemy

or to

or to defend; and alſo according to the ſituation of the ground, and ſhall ſerue only to haue in a readineſſe and memory, all that which a battell well ordered would require, according to the ground where it ſhall be; ſo that there ſhall neede no more but to commaund the men to be marſhalled into the order that ſhall bee appointed to the framing of the battell, according to the ſituation of the ground. But firſt I will ſet you downe orderly a table of proportionall numbers, in ſuch proportion as one would make the breadth of the battell to haue vnto the length, and ſo many will I ſet downe of proportionall numbers, as ſhall ſuffice to make euery ſort of battell, that may be more large then long, or equall; as hereafter ſhall appeare. And now of proportionall numbers, I will begin to ſpeake of thoſe which be in proportion of equality: as 1 to 1, 2 to 2, 3 to 3, 4 to 4, and 5 to 5, and 6 to 6, and ſo of more; prouided they bee of equall compariſon the one to the other. But yet to frame a battell, thoſe ſhall be taken which be in leaſt proportion, as 1 to 1, and thoſe numbers which are of equall compariſon, as 1 to 1, doe ſerue onely to make the battell quadrat of number of men: that is, ſo many men in breadth as in depth of the battell. But when you will make a battell that may be of more men in breadth then in depth, then ſhall you take the numbers which be in proportion of inequality, ſo much as you wold haue the battell to be of more men in breadth then in depth; as 3 to 2, or 5 to 3, or 7 to 4, and ſuch like, as ſhall be found in theſe tables following of numbers compared the one to the other in inequality: beginning with thoſe of the leaſt proportion.

Proportionall numbers ſeruing to the ſetting of battels.

Proportions of equality.

Proportions of inequality.

A table of proportions, of ſo much as you would haue the battell to containe in breadth of number of men vnto the length.

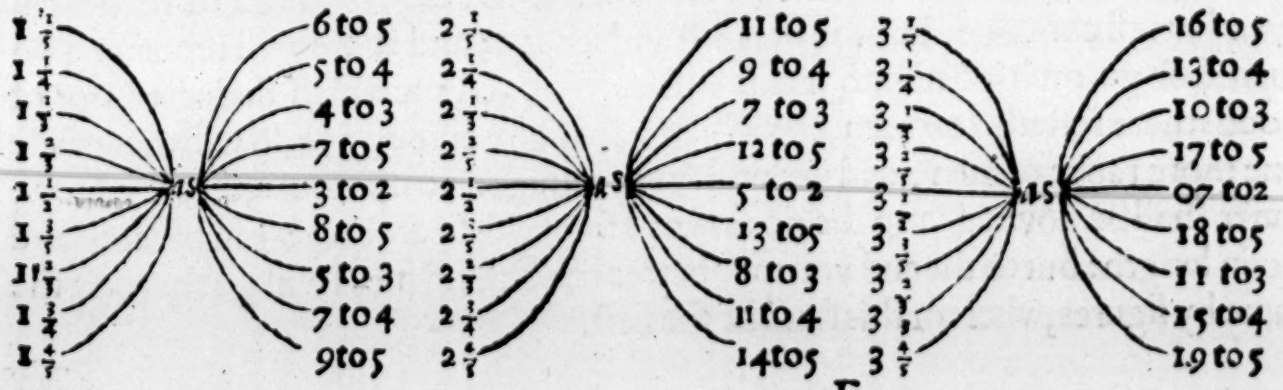
Proportion of Equalitie.

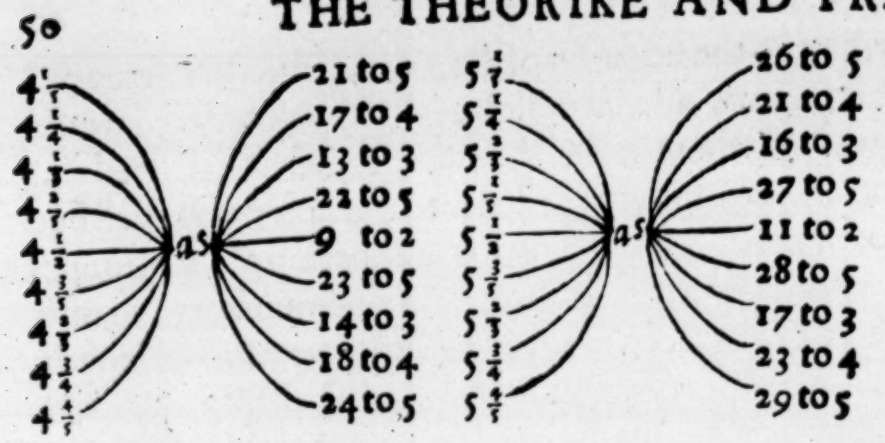
As 1 to 1, that is, the battell to containe ſo many men in breadth as in length.

Proportions of Inequalitie.

That is, the battell to be more broade then long, or more in front then in flanke.

As 2 to 1, that is, the battell twice ſo broade as long.
3 to 1, that is, three times ſo broade as long.
4 to 1, that is, foure times ſo broade as long.
5 to 1, that is, fiue times ſo broade as long,
6 to 1, that is, ſixe times ſo broade as long.





To bring theſe fractions into whole numbers of proportion, you muſt worke thus: Multiply the whole number by the denominator of the fraction, and adding thereunto the numerator of the ſaid fraction, the proportiõ is found: as for example, to haue the battell to containe two times, and a third more broade then long. I ſeeke in the table 2 1/3 whereof the whole number is 2, and the fraction is 1/3. Now multiply the whole number 2, by the fractions denominator 3, and it maketh 6, whereunto ad the fractions numerator, which is 1, and it amounteth 7, ſo is 2 1/3 in proportion as 7 is to 3, and ſo muſt you worke any the like numbers.

In all theſe aforeſayd proportions, to make the battels of proportion of equality, that is as broade as it is deepe, or of inequality, which is more in breadth then in depth, both theſe wayes is to bee vnderſtood of men, and not of ground; for of the proportion s of ground I will ſpeake hereafter.

Theſe proportions of men and not of ground.

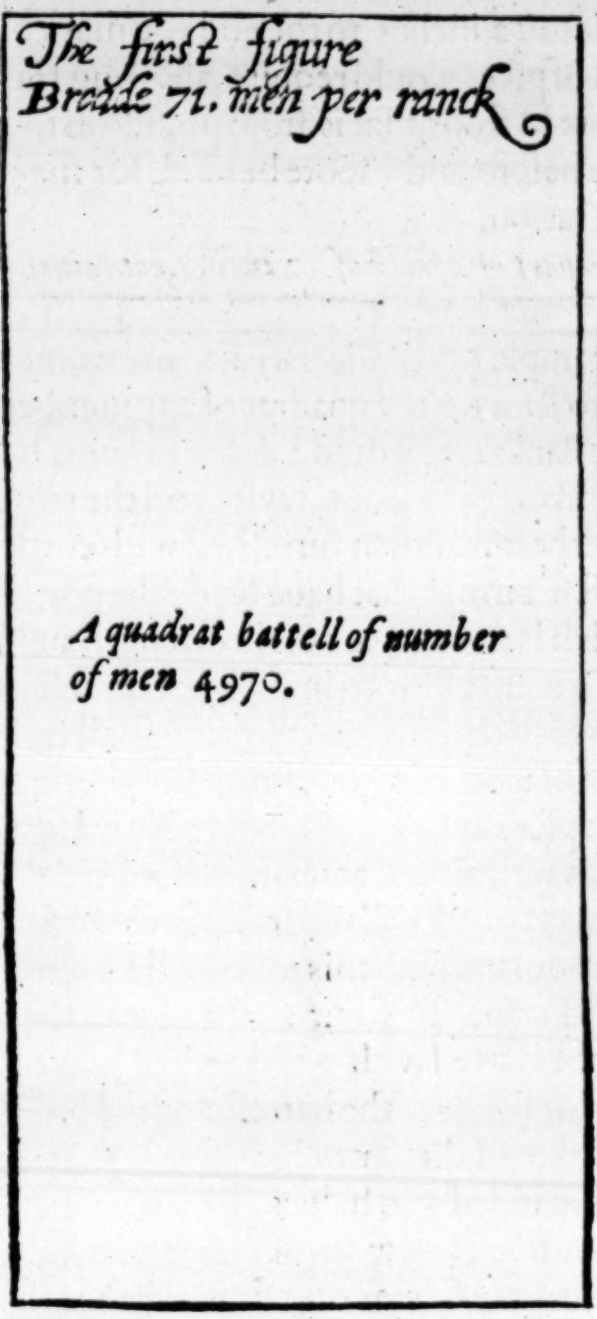
Gent. Me thinks I vnderſtand touching the proportions of equality, and inequality, & that is ſo broade as deepe, or more in breadth then in depth, vnderſtanding of men, both of the one manner, and the other; but I would gladly (Captaine) that you would ſhew it vs by example, for ſo we ſhall the better conceiue of the matter.

Capt. I will moſt willingly: Therefore to begin, I will ſet downe to make a ſquare battell of number of men, that is, ſo many men in front as in flanke: And let our whole number be 5000 men, of armed pikes, and ſingle pikes one with another. Now to frame this quadrat battell, you ſhall take in the aforeſaid tables, the numbers of proportions of equality, which are as 1 to 1. Then muſt you ſet downe your rule in this ſort: Setting downe firſt the proportion of equality for the firſt and ſecond number, and the number of men for the third number, thus 1 *prime*, 1 *ſecond*, 5000 third. This being done, multiplie the 3 number which is 5000, the number of men by 1, the ſecond number, and it maketh ſtill 5000, (for 1 doth neither multiplie nor deuide) then deuide the ſaid firſt multiplied number 5000 by 1 the firſt number, and it maketh yet 5000. Now out of that 5000, you ſhall take the quadrat roote, which is 70. So 70 rankes of men ſhall your battell containe, both in breadth and length; and there will remaine 100 men. For 70 multiplied into it ſelfe reſulteth 4900, the which deducted out of 5000, there reſteth 100 men, the which 100 men deuide by 70, ſo will there ariſe one more ranke of men, and yet will there remaine 30 men ouer, the which one ranke ſhall be ioyned vnto the 70 rankes aforeſayd, ſo are they 71 in breadth and 70 in length: but to the end you may better vnderſtand me, I will go ſhewing the ſame by figures, whereof this ſhall be the firſt.

The rule to frame a ſquare battell of men.

(1
5ø(o(o
7 o
14

The



And the 30 men which do remaine out of the body of the battell, they ſhall be reſerued for other purpoſes.

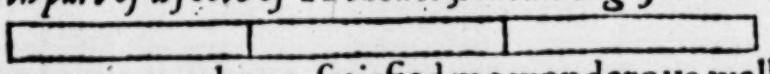
And this ſquare battell of number of men may be done in a more ſhorter and readier way, thus. Take the quadrat roote of 5000 ſimply, which is 70, and with this 70 deuide the 5000 men, ſo will there come 71 for the breadth of the battel, and there will remaine 30 men. And thus your battell will containe 70 rankes in length, and 71 men *per* ranke in breadth, with 30 men remayning as aforeſayd. Now although the battell be more broade then long, or more men in front then in flanke by one ranke, yet is it neuertheleſſe, after the order of warre, called a ſquare battell of men. *A more exquiſit way to frame any ſquare battell of men.*

1
50|00|
7 0
14
x(3
Deuide 300(0
by 770(71

The table drawne aforeſayd for the proportion of equality, that is, that the battell do containe ſo many men in breadth as in length, ſhall ſerue alſo to ſhew the order which is to bee obſerued in the battels that are to be be made of more men in front then in flanke, that is, in proportion of inequality, as hereafter I will ſhew you, giuing you to vnderſtand that all the figures ſhall haue their *ſcala* deuided into paſes, and euery geometricall paſe into 5 foote, of the which meaſure of feete I haue here vnder ſet downe the fourth part, which is three inches, for that *Geometricall ſcale. foote.*

euery foote is deuided into 12 inches, to the end you may conceiue what quantity of ground euery battell of pikes would require, allowing for euery mans ſtation ſet in aray to fight, 3 foote in front, that is, from pouldron to pouldron, and 7 foote in flanke, that is 3 foote before, and 3 foote behind, for the vſe of his weapon, and one foote for his owne ſtation.

The fourth part of a foote of 12 inches, containing 3 inches.



Gent By this your example you haue ſatisfied me wonderous well, in giuing me to vnderſtand how to ſet a battell quadrat of any number of men, which is ſo many men in front as in flanke: yet would I deſire to know how to arme or impale this battell with armed pikes, both front, tayle, and the two flankes, conſidering that few armies haue all their pikemen furniſhed with corſlets complete.

Capt. True, there are few armies that haue ſcarſe the one halfe of their pikemen armed with corſlets, which is a great part of the ſtrength and beauty of the battell, therefore we muſt ſeeke a courſe how to impale any battell with ſuch armed pikes as they haue: to do the which theſe rules following ſhall ſerue to impale any battell, as well of proportion of inequality, as of equality, the foreward, the reareward, and the two flankes, with pikes and armed corſlets. Now I ſuppoſe the whole number of pikes to be 5000, as well armed as vnarmed, whereof there be 2000 armed pikes with corſlets; the ſayd 2000 I will repart into two equall parts, by 2, or taking the $\frac{1}{2}$ of 2000, which is 1000: and with this 1000, will I impale the two flankes, and with the other 1000 will I arme the front and traine of the battell. Now firſt to arme the two flankes of the battell with 1000 armed pikes, I will deuide 1000 by 70, which is the depth or flanke of the battell, and the product will be 14 rankes of pikes to arme the flankes of the battell, with 20 pikes of ſurpluſſage: the 14 rankes ſhalbe halfed, or deuided into halues, which is 7 rankes; with the which 7 rankes I will arme the one ſide, and with the other 7 rankes the other ſide of the battell, or more or leſſe vnto any ſide, as occaſion or neede ſhall require: as in this figure following ſhall appeare.

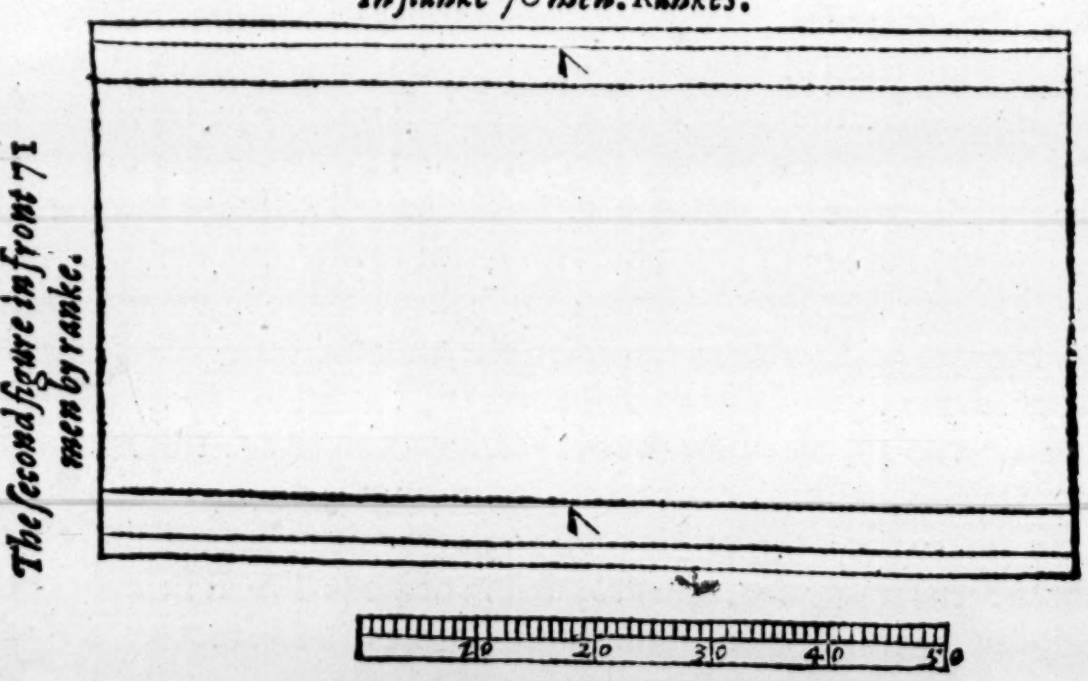
To impale the battell with your armed pikes the rule.

2000
parted. 1000

3(2
de.2000(14
by 500
7

In flanke 70 men. Rankes.

The ſecond figure in front 71 men by ranke.



A ſcale of fiftie paces, of 5 foote to euery pace.

And

And the 20 armed pikes which before remained, ſhall be added vnto the other 1000 which are to arme the front and rearegard of the battell, ſo they are 1020 pikes armed: with theſe 1020 armed pikes, ſhall the front and rereward be armed thus; firſt deduct the 14 rankes, which went to arme the two flankes of 70 men in length, out of 71, which is the breadth of the battell, ſo reſteth 57 rankes for the breadth: with this 57 deuide the 1020 armed pikes, and there will come foorth 17 rankes of armed pikes, to arme the head and tayle of the battell: and of theſe 17 rankes you ſhall ſet 9 rankes in the front, and 8 rankes in the reareward; with more or leſſe on either, as neede and cauſe ſhall require: as by this 3 figure following ſhall appeare.

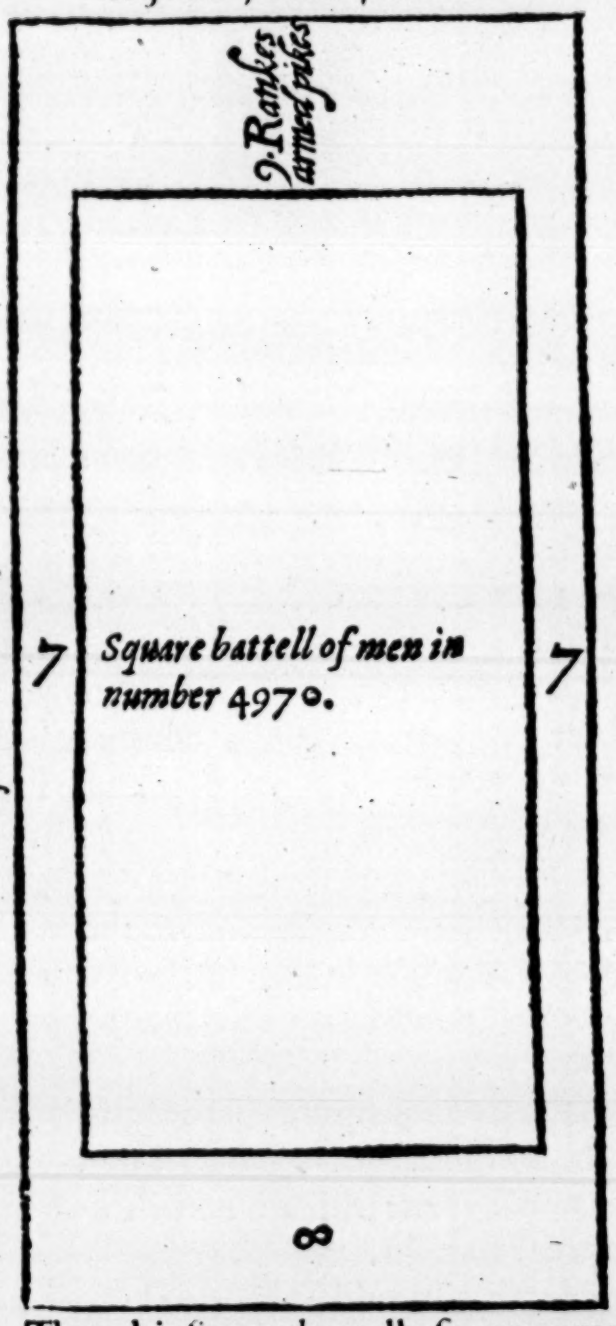
The Romaines.

adde 1000
vnto 0020
1020

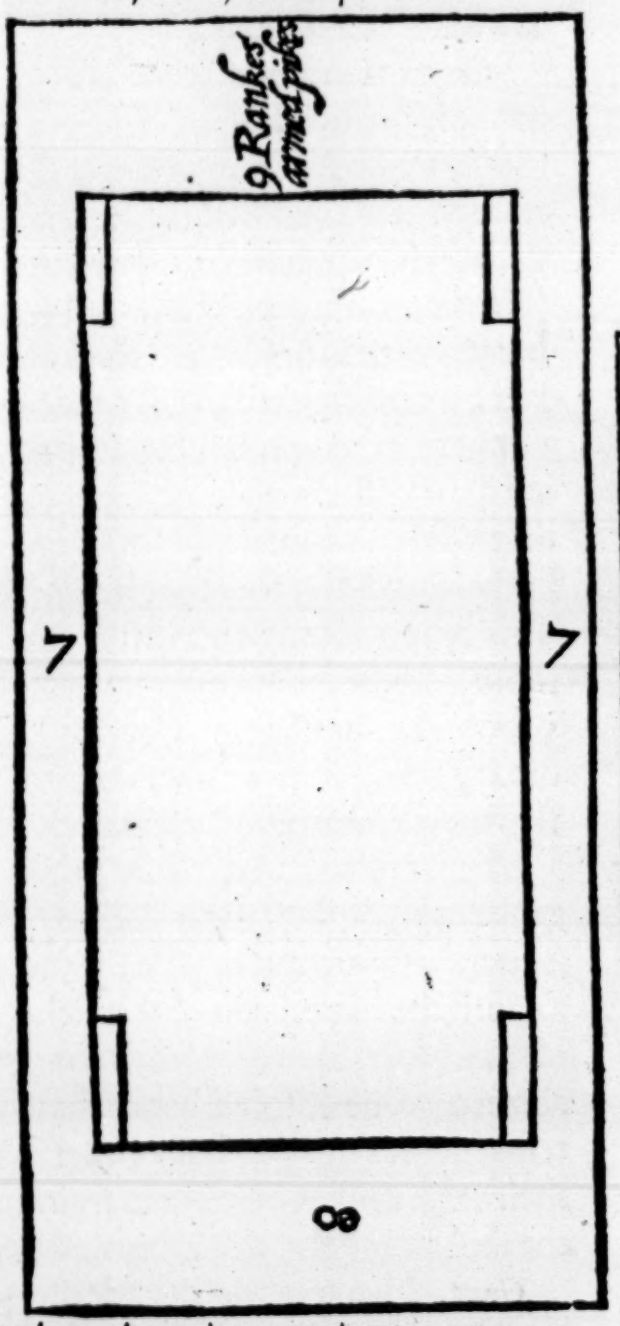
out of 71
ſubſtract 14
reſt 57

57(5
4
55(1
den. 1020(17
by 577
5

The 3 figure.
In front 71 men per ranke.



The 4 figure.
In front 71 men per ranke.





Thus this ſquare battell of men commeth to be in length 70 rankes, at 71 men *per* ranke in front with 9 rankes of armed pikes in the vaward, and 8 rankes in the reareward: and with 7 ranks of armed pikes at each ſide in length, as you ſee. And remaining 51 armed pikes out of the impalement, the which you may place at the angles or corners of the vnarmed pikes, as ye ſee in the 4 figure, or where you ſhall thinke fitteſt for the defence and ſtrength of the battell; and not to leaue them out, (for being part of the ſquare) as you did the 30 pikes which before re-

mained at the enlarging of ſo many men in ranke in the firſt figure. The which 51 armed pikes are now placed in the angles of the battell, as in the 4. figure before may appeare: that is, with 7 rankes at 2 men *per* ranke in the fore angles, and 6. rankes at 2 men *per* ranke in the reareward angles.

Gent. O how it delighteth me to haue learned of you, how to arme or impale a battell. But now would I faine know if there be this number of men in the battell by you ſuppoſed, with the 30 at firſt remaining.

Capt. To know if there be in this battell the number of 5000 men, with the 30 which aduaunced at the firſt framing of the battell, do thus: multiplie the length by the breadth, that is 70 by 71 men, & it amounteth 4970 men; vnto the which adioyne the 30 which remained, ſo will they amount vnto 5000 pikemen, armed and vnarmed, as before was ſet downe, to ſet the ſaid battell, in the firſt figure, which is your demaund.

The proofe.

Multiply 70 × 71 = 70 + 470 = 4970 + 30 = 5000

Gent. This is verie eaſie; but now would I faine know, if they haue the proportion of equalitie.

Capt. That you ſhall know thus: deuide the breadth by the length, as to repart 71 by 70, the product is 1. And although that 1 do remaine of the breadth, yet it is called a ſquare battell neuertheleſſe.

Gent. Captaine, I am well ſatisfied in vnderſtanding the proportion that a battell hath in breadth to the length: but now would I gladly know how long and large is this ſquare battell of men, I meane how much ground it will occupie?

Capt. Firſt you muſt vnderſtand (as I told you before) that euery man martialled in battell array to fight, will require in his ſtation, 3 foot of ground in breadth, that is from ſhoulder to ſhoulder, and 7 foote of ground for length, that is 3 foot for before him, 3 foote for behind him, and 1. foote of ground for his own ſtation. This being noted: then muſt you multiplie the 71 rankes of men in front by 3 foote, and they will amount vnto 213 foote, and the 213 foote ſhall be deuided by 5 foote, accounting 5 foote to a paſe, and the geometricall paſe to conteine 2 ordinary going ſteps or paſes of a man: ſo will there come forth 42 paſes and 3 foot. By this reckening will the battell conteine 42 paſes and 3 foote.

A rule to know what quãtitie of ground any battell will require, each armed mans ſtation 3 foote in breadth 7 foote for length.

Multip. 71 men by 3 foot. = 213 foot.

de. 213 (42 3/5 by 5

And now to know the length thereof in ground, you ſhall multiplie the 70. rankes of length of the battell, by 7 foote, ſo will there come 490 foote, the which 490 foote you muſt deuide by 5 foote (which is a paſe) & there ariſeth 98 paſes; & ſo doth the battell conteine in length 98 paſes of ground. Thus the ſquare battell of number of men commeth to conteine more ground in length then in breadth about 2½ twiſe & third, as you haue ſeene in the 3 and 4 figures of the ſquare battell of men. Thus you haue vnderſtood of a battell, ſquare of number of men, with their armed pikes in front, in traine, and the two flankes: which is in ſuch order as the ſaid battell ſhould be framed vpon the point to fight.

Multi. 70 ranks by 7 foote. = 490

de. 490 f. (98 by 5

Gent. I haue very well vnderſtood the order that ſhould be kept, to know how broad and long is the battell of ground: but I beſeech you to ſhew me now, the order to be obſerued in the framing of the ſaid battels, ſo that there ſhould neede no more but the Sergeant Maior, to appoint the ſouldiers the order they ſhould keepe, for to frame and order the ſaid battell with ſpeede and in readineſſe.

A rule to frame theſe battels with ſpeed.

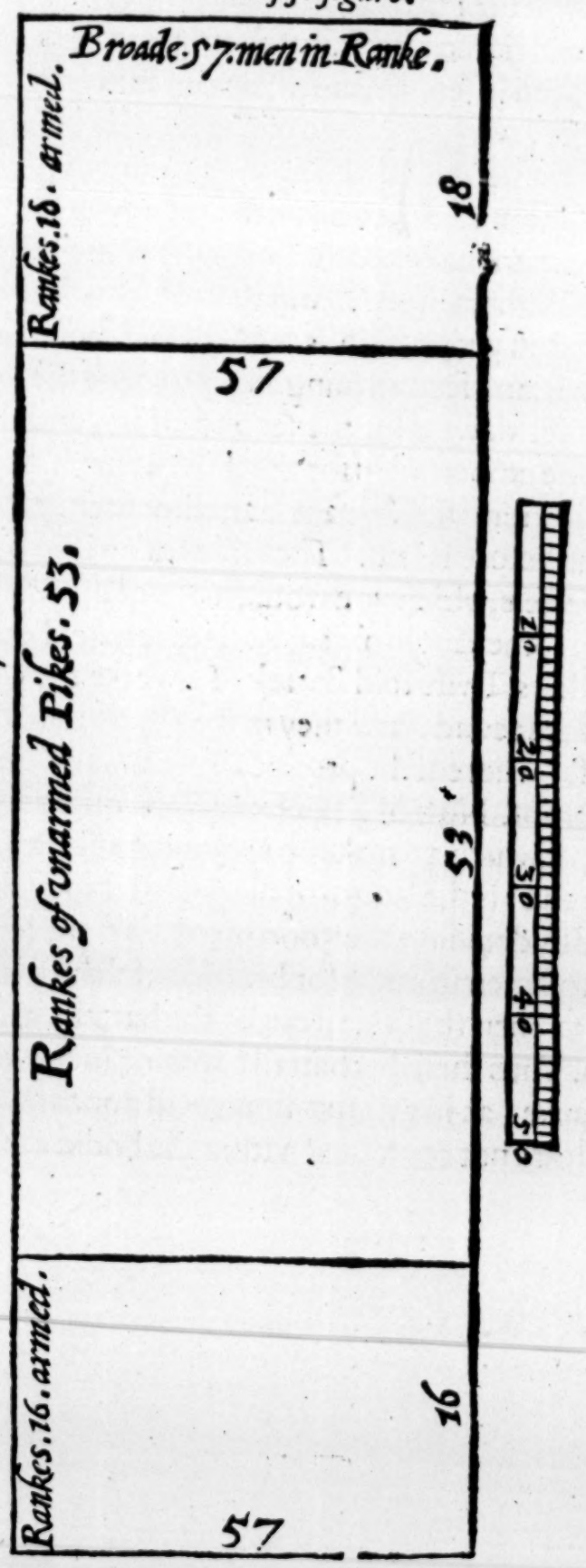
Capt. Truly, your demaund is good, ſith that ſpeedineſſe is the proper and peculiar part of the arming of theſe battels. To do the which you ſhall worke thus: The armed pikes which are in the 2 flankes ſhall be accommodated and placed in the

the front and in traine of the battell, as in the calculation of the 3 and 4 figure, whereas there be 70. rankes, at 14 men *per* ranke, that is 7 men in ranke for the arming of euery flanke, then multiplying 70 by 14, do amount 980 armed men; and 980. armed men you shall deuide by 57. which is the rest of the breadth of the battell, (being of vnarmed pikes) & there resulteth 17 rankes, at 57 armed men *per* ranke. Of the which 17 rankes, at 57 men by ranke, there shall be adioyned 9 rankes vnto the front, and 8 rankes vnto the traine of the battell, with the other 9 and 8 ranks, which were before of armed pikes at the front and traine: So the battell shall be in length or by flancke 87 rankes, at 57 men *per* ranke in front, with 18 rankes of armed pikes at the foreward, and 16 rankes of armed pikes in the reareward, as in this figure following shall appeare.

Multiply 70 *by* 14 — 280, 70 — *Sum.* 980

by — *deuid.* 57 | 980 (17. 11/57) — 57 | 77 — 57 | 20

The fift figure.



What to do with the remaines.

And the 11 armed Pikes which remained at the laſt deuiſion, when it ſhalbe time to arme the two flankes of the battell with ſpeed, then vnto one of the two flanks ſhall they be added, which is vnto that flanke where the ſame ſhall bee found wanting.

Gent. Me thinks that I vnderſtand ſufficiently, how to arme and ſet a battell with celeritie and ſpeed at euerie occaſion as ſhall be offered, and alſo the order to be obſerued in ſetting a battell of equalitie, which is as manie men in breadth as in length: but now I would gladly learne how to frame a battell of inequality, which is of more men in breadth then in length?

Rules to frame all battels in proportion of inequality, or two fold battels.

Capt. Sir, knowing how to frame the calculation of the proportion of equalitie, that is, as many men in breadth as in length of a battell, it ſhall be verie eaſie for you to do that of inequalitie; which is a battell more broade then long: yet neuertheleſſe will I giue you the inſtruction of the proportion of inequalitie. Now put the caſe, that you will frame a battell of proportion of inequalitie, which is of more men in breadth then in length, and that your number be 5000 men, of armed and vnarmed Pikes, as afore is ſayd of the Square battell of men. And put the caſe that you will frame this battell $2\frac{1}{3}$ times more in breadth then in length (for this proportion is more vſed then any other in warres) for that this is the proportion which commeth to make a battell quadrat of ground, wherein moſt men are brought at once to fight in front. And to make this battell you ſhall take in the table 2 and $\frac{1}{3}$ which is in proportion as 7 to 3: and theſe two numbers are to be ſet downe for the firſt, and ſecond thing. Now to haue the length of the battel, the ſecond number is ſet downe for the ſecond thing, and the number of men which you wil haue to be embattailed for the third, as hereunder appeareth. Then proceed as is done in framing the Square battell of men. $7 \frac{1}{3} \frac{2}{3} 5000$. Then multiply and deuide as before is ſaid. The ſame order is to be obſerued in euery other proportion of battels, which you would make of more men in breadth then in length, tearmed by ſome Engliſhmen, Baſtard ſquare, Brode ſquare, and Baſe ſquare, or by ſome others, Twiſe fold Battels. To worke the which, now multiply 5000 the third, by 3 the ſecond, and they make 15000: and this 15000 ſhall be deuided by 7 the firſt, whereof the product is 2142, and 6 men remaining, of which 6 make no accompt. Now of 2142 extract the quadrat roote, which is 46 and 26 yet remaining, of which 26 make no reckening alſo, as before is ſaid: and, this 46 (the roote of 2142) is the length of the battell. Now, the breadth or front thereof ſhall be found by deuiding the 5000 men by 46 the length of the battell, and there will come 108 men in ranke for breadth of the battell, and 32 men remaining, the which 32 men ſhall ſtand out of the battell, as before is ſaid in the Square battell of men. Thus ſhall this battell containe in flanke 46 rankes, and in front 108 men per ranke, as in this ſixt figure will appeare. And there will remaine 32 men, which are not contained within the bodie of the battell.

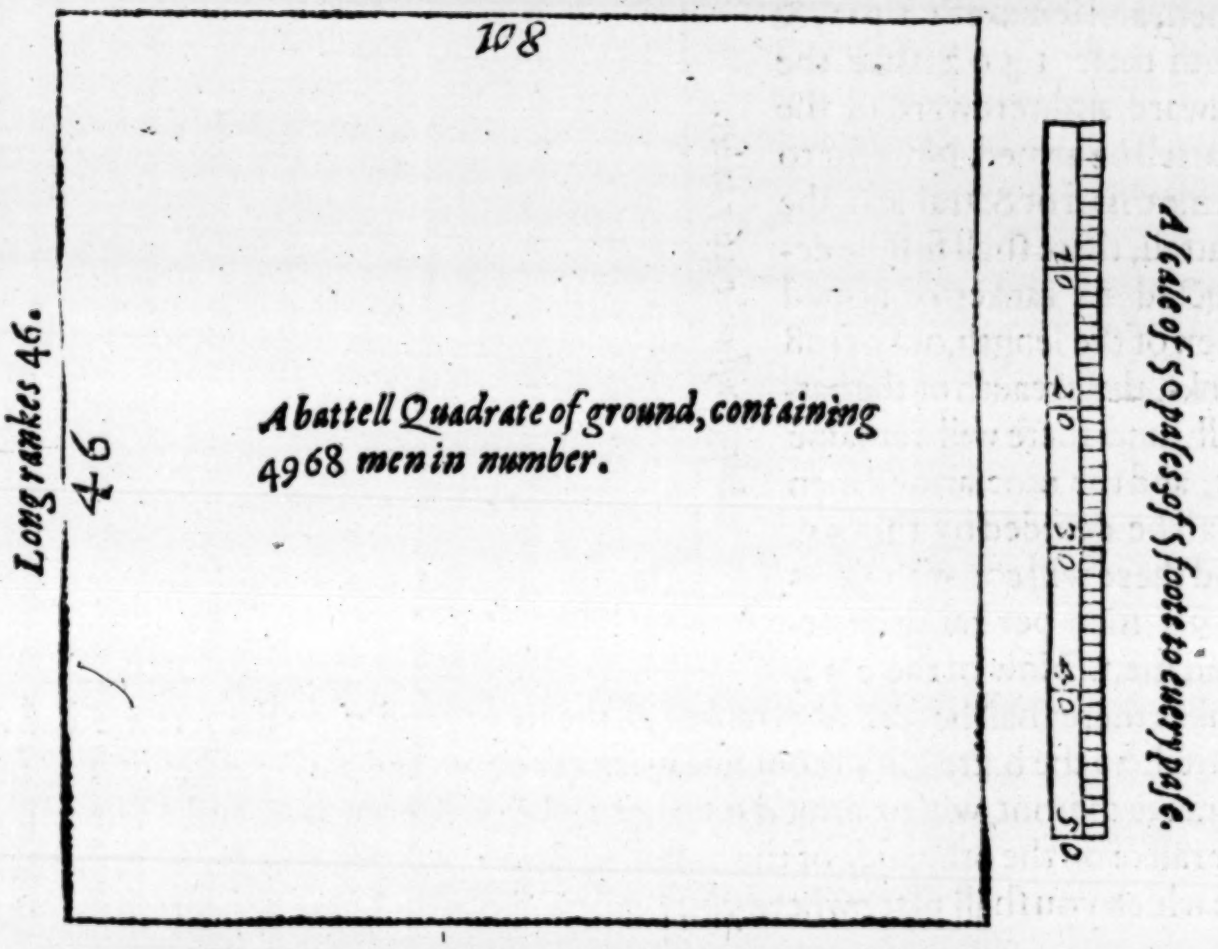
The Rule.

1 2 3
7—3—5000
3
15000
27 (6
den. 15000 (2142
by 7777
(2
56 (6
22|42|
4 6
8
(3
248 (2
5000 (108
4666
44

The

The ſixt figure.

Brode 108 *men in ranke.*



Gent. Now hauing vnderſtood how to frame this battaile of proportion of inequalitie, which is of more men in breadth then in length, in euerie proportion with facilitie, ſhew me how to arme the ſame with armed pikes.

Capt. To arme this battell of inequalitie, that is, more men in front then in flanke, I wil ſhew you verie eaſily. Let vs ſuppoſe to arme this battel round about, the front, the traine, and the two ſides proportionally, according to the proportion that the breadth of the ſaid battell hath vnto the length of the ſame, which is, as 7 vnto 3. Adde the ſaid 7 vnto 3, and it is 10: ſo ſhall it be as 10 to 3. Then ſee in 5000 men, how many be armed with corſlets, and I ſet that there be 2000, as before is ſaid in arming the Quadrat battell of number of men. Now ſhall you part theſe 2000 armed pikes into two proportionall parts, as 10 to 3, the one part to arme the two flanks, the other to arme the vaward and rereward of the battell; then place downe your rule in this ſort. If 10 require $\frac{2}{3}$, what $\frac{3}{2000}$. Now multiplie 3 the ſecond with 2000 the third, and it reſulteth 6000: and this 6000 deuide by 10 the firſt, ſo will there come 600 armed men; and theſe 600 armed men ſhal be to arme the two ſides: and deducting 600 out of 2000, there reſteth 1400 armed men, the which are to arme the front and reregard of the battell. Now muſt theſe 600 armed men be reparted by the length of the battell, that is, by 46. ſo will there come 13 in ranke for the length. And of theſe 13 rankes, you ſhall place 7 per ranke on the one ſide, & 6 per ranke on the other ſide of the battel in length, as in the figure on the next page appeareth.

The order how to empale with armed pikes the battels in proportiõ of inequalitie.

10-3-2000
3
6000
6000 (600
xxxo
2000
deduct 600
reſt 1400
24 (2
600
46 (13

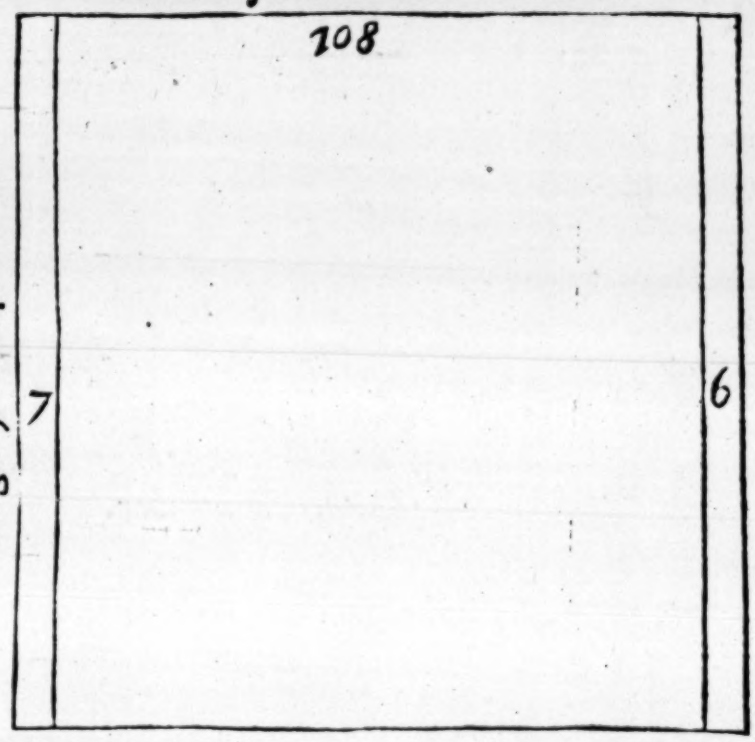
Remainet.
1400
ad. 0002
1402
108
13
95

(7
49
55(2
1402(14
955
9

And there remaineth 2 armed men, the which ſhall be ioyned with the 1400 armed men, and it maketh 1402, & with theſe 1402 ſhall the vaward and rereward of the battell be armed. Now for to arme this frōt & traine of the battell, there ſhall firſt be deducted 13 rankes of armed men of the length, out of 108 ranks, the breadth of the battell, and there will remaine 95, and the 1402 armed men ſhall be deuided by this 95, and there will come 14 ranks at 95 men per ranke of armed men. Now of theſe 14 rankes there ſhall be placed 7 rankes at the front, and 7 on the rereward of the battell. So the battell ſhall containe in length or by flanke 46 rankes at 108 men by ranke in front, with 7 armed men per ranke on the one ſide, and 6 armed men per ranke on the other ſide of the battell in flanke, and 72 armed men remaining, the which you ſhall place where you ſhall thinke beſt, as here appeareth in figure.

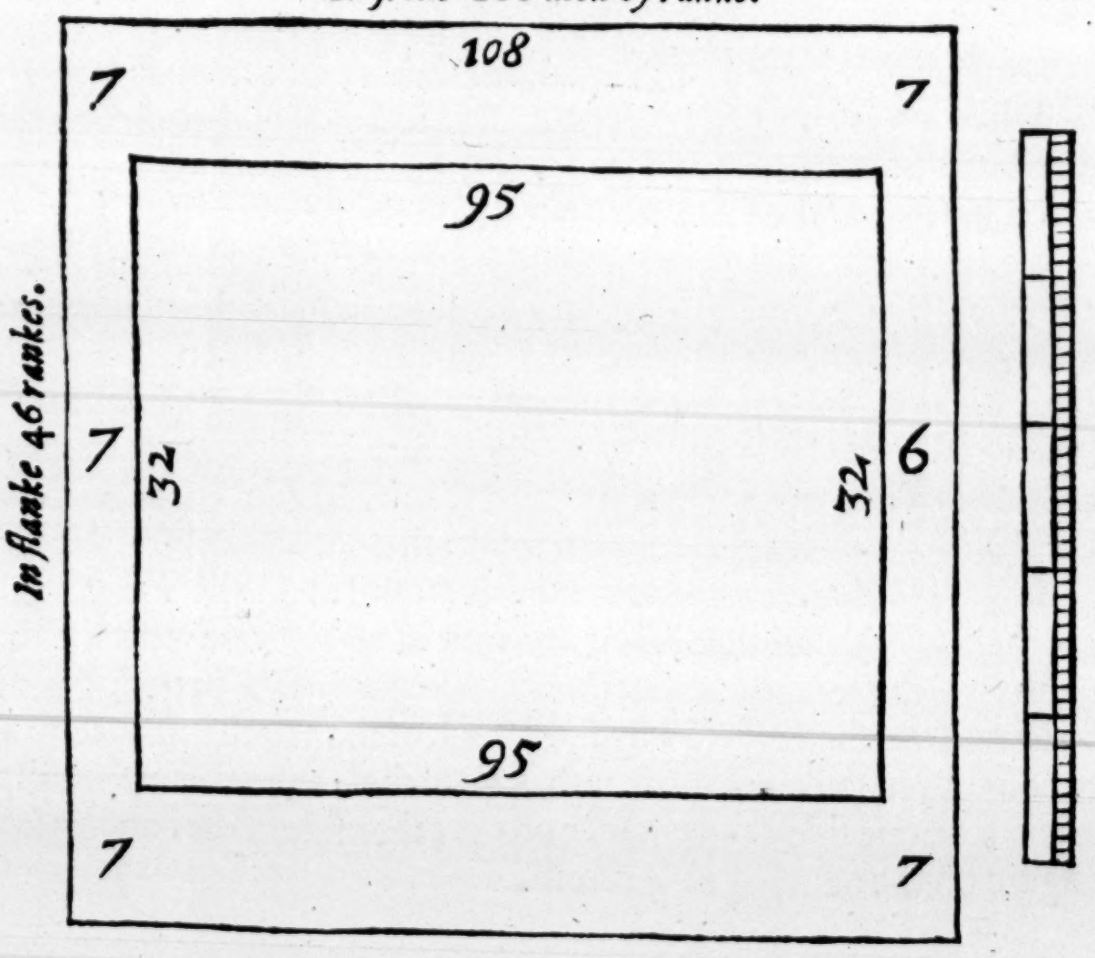
The ſeuenth figure.

Brode in front 108 *men in ranke.*



The eight figure.

In front 108 *men by ranke.*



Now the 72 men remaining, I haue placed in the 4 angles, as in this 8 figure aboue appeareth:

Gen. I perceiue how to arme a battell of proportiõ of inequalitie, the vaward, the reareward, & the two ſides: But (I pray) tell me, the battell being thus framed, how I may know whether this battell hath this proportion of his breadth to his length, that is 2 times and $\frac{1}{7}$ more broade then long or as 7 to 3.

Capt. To know if the length to the breadth of the battell hath his proportion, as 7 to 3, you ſhall deuide 108 the breadth, by 46 the length, the product wil be 2, and 16 remaining, which is about $\frac{1}{3}$ of 46 a litle more. *The proofe.*

Gent. But how ſhall I proue, that in this battell of inequalitie there be the 5000 men conteined?

Capt. Thus: multiplie the breadth of the battell 108, by 46 the length, and they will amount 4968, vnto the which adde the 32 men which remained, and the ſumme is 5000.

Gent. Now I beſeech you to declare vnto me the length & breadth of ground, that the battell of inequalitie doth occupie.

Capt. Marrie, thus: It ſhall be ſuppoſed to allow 3 foote in breadth, and 7 foote in length for euery ſouldier, or litle more or leſſe, as ſhall be thought good: Now multiplying 3 foote with 108 men, the breadth of the battell, it will amount 324 foote, and 324 foote ſhall be deuided by 5 (accounting 5 foote to a paſe) thereof will come 64 paſes and $\frac{4}{5}$, which is 4 foote, and that is the breadth of the battell. *The rule to know the quantitie of ground this battell conteineth.*

And to know the length of the battell, multiplie 46 rankes of length by 7 foote, there will come 322 foote: and deuide the ſayd 322 by 5, there will come 64 paſes and $\frac{2}{7}$, which is 2 foote, for the length of the battell: which will bee neare about the length of proportion: and this is the perfect battell of ground.

Gent. I pray, let me aske you, In what manner might I accommodate the calculation of the battell, to the end that it might be done with diſpatch and readineſſe, as you haue ſhewed me before in the Quadrate battell of number of men?

Capt. To doe this: deduct 13 rankes of armed men which are in the two flankes in length, out of 108 men in breadth, there will reſt 95 *per* ranke in breadth of the battell. Then ſhall be ſought in 13 men by ranke in length, how many armed men by multiplying 46 of length, by 13 rankes, will amount 598, and 598 ſhall be deuided by 95 the product will be 6 rankes of men, at 95 *per* ranke of armed men, and 28 armed men remaining: And of theſe 6 rankes of armed men, there ſhall be put 3 at the head, and 3 at the taile of the battell, with the other 7 rankes which were there before: And ſo the battell ſhall conteine in length 52 rankes, at 95 men *per* ranke in breadth, with 10 rankes at the head, and 10 rankes at the taile of armed men, as I will ſhew you in this 9 figure following: and there remaines 28 armed men, the which at the time that this battell is made, ſhalbe placed in one of the flankes, for there they want, as before is ſaid in the account of the 5 figure of the Square battell of men. *The rule to accommodate this calculation with ſpeed.*

out of 108
deduct 013
95
46
13
138
46
598
(2
5(8
598 (6
95

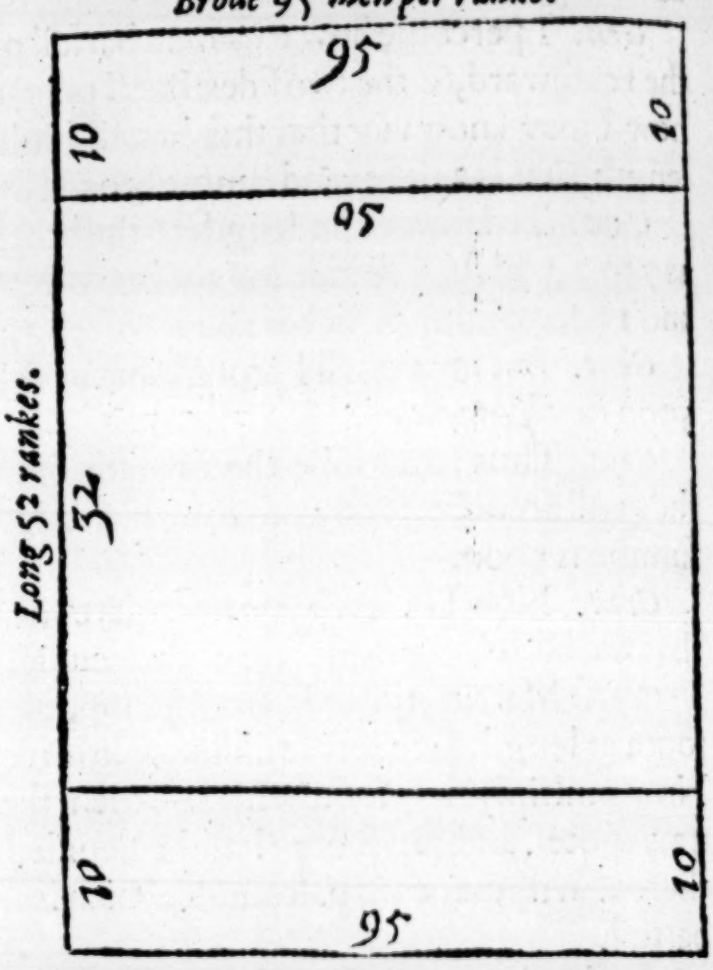
Where to place the remaines.

Gent. I reſt ſo well ſatisfied with your good diſcourſes and demonſtrations, that I finde my ſelfe more and more deſirous to demaund of you other particularities: wherefore I pray you to ſhewe mee the manner to march, and ſet a battell with ſpeed, occaſiõ offering to fight.

Capt. Willingly, as farre as my ſmall skill wil extend. Therfore touching the order of marching, and out of the order of the ſaid marching, to ſet a battell with ſpeed; I ſay that there are three manners obſerued in the making therof: of the which before that I declare their orders one by one, I will with breuitie repeate all that which before I ſhewed you.

The ninth figure.

Brode 95 men per ranke.



Repetition of the former.

I haue told you before, how to make the Calculation of battels, as well of the ſquares of men, as of Proportiõs of inequalitie, containing more men in breadth then length (termed by vs Engliſhmen *Baſtard ſquares*, *Broade ſquares*, *and Baſe ſquares*.) And I haue told you of the proportion of the breadth vnto the length: and moreouer, how brode and long will the ſaid battels containe in ground: the which inſtructions will ſerue to frame any other battell, that may be more brode then long in any other proportion, with the helpe of the Tables which before I haue ſhewed you: for in the ſame may be found euerie proportion that ſhall be needfull, to frame any battell which may be more brode then long in number of men, or equall.

Out of 3 maner of marchings to frame a battel with ſpeed.

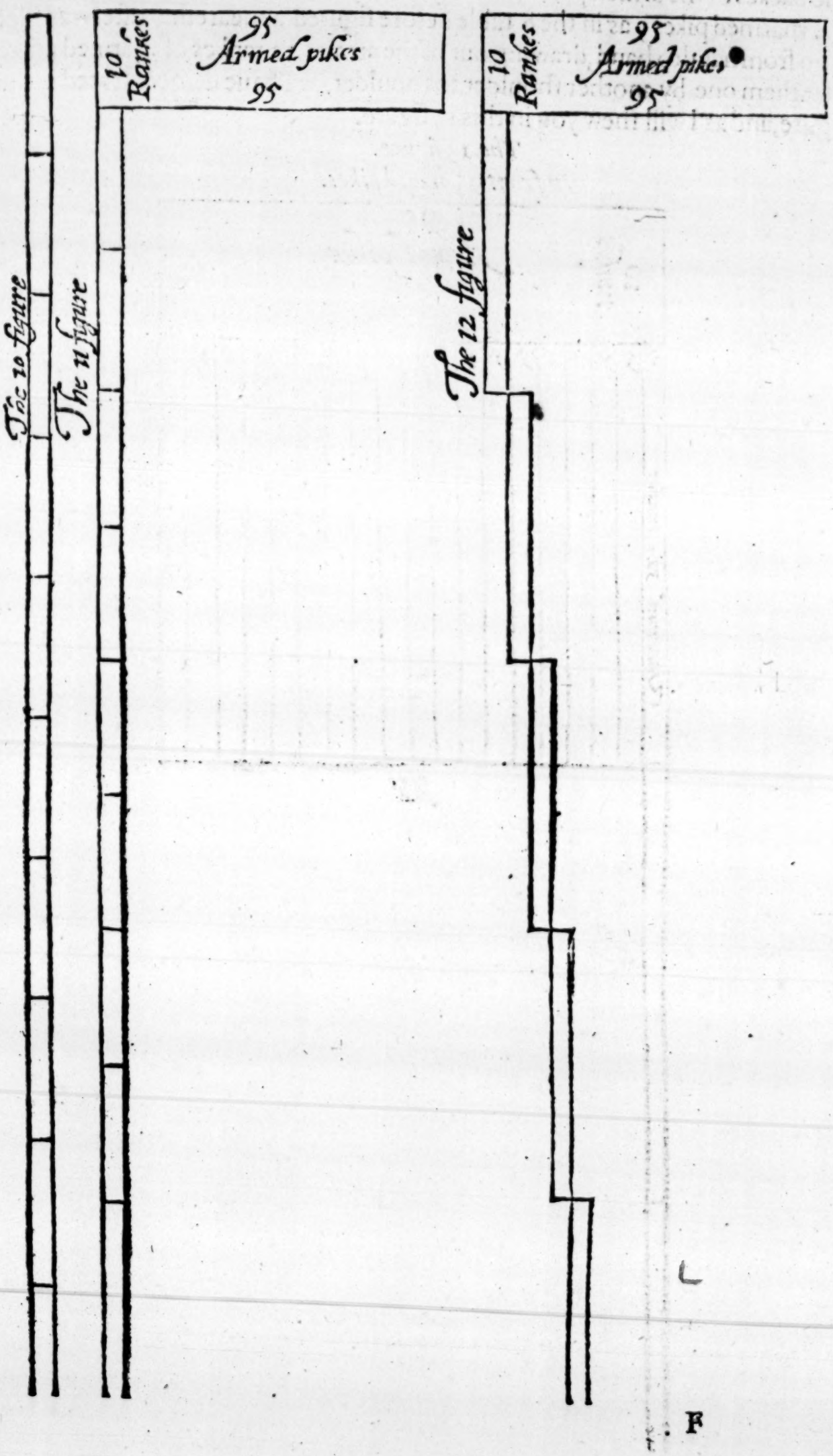
Now wil I ſhew you the maner how to frame a battell with ſpeed; and this ſhal be by the inſtructions of the tables before giuen. And this battell ſhal be ſpeedily ſet after the order of the three maners of marching, as at the beginning I told you. The firſt maner is, when the companies do march with one part of the armed Pikes at the foreward, and an other part at the rereward of the vnarmed Pikes, as I will ſhew you in the tenth figure.

The firſt maner.

In this caſe, hauing the Table in memorie, onely there reſteth to commit vnto two expert officers (as Caporals of the field, or ſuch like) at the time of ſetting the battell, that the one go vnto the head and the other vnto the traine of the Ordenances or Arrayes: and let him that ſtands at the head, cauſe or commaund to turne or wheele either from the right hand, or from the left (as ſhal be moſt conuenient) 95 rankes, at 10 armed men per ranke, and hauing finiſhed, to ſet the 95 rankes at 10 armed men *per* ranke, he ſhall cauſe them to turne their faces from that part whither the Ordinances or Arrayes do looke, as you ſhal ſee deſigned in the eleuenth figure on the page next following.

The

The 11 figure. *The 12 figure.*

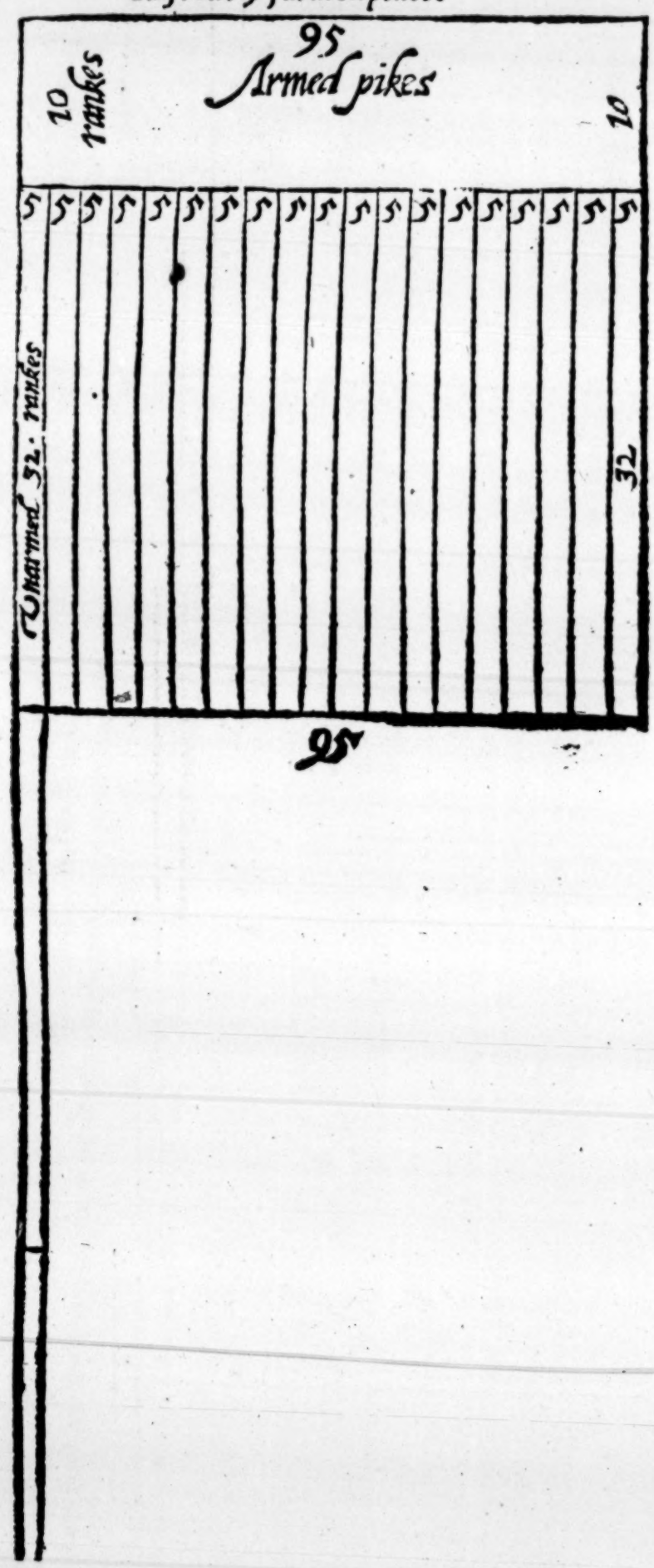


F

Then beſides this, let him place 32 rankes of the arraies of the vnarmed pikes at the backes of the armed pikes, ſo many as they be rankes in length in the battell of the vnarmed pikes, as in the 8 table before figured appeareth; afterward let him go from hand to hand, drawing out of the arraies 32 rankes of vnarmed pikes, and ſet them one by another ſhoulder to ſhoulder, as I haue demonſtrated in the 12 figure, and as I will ſhew you in this 13 figure.

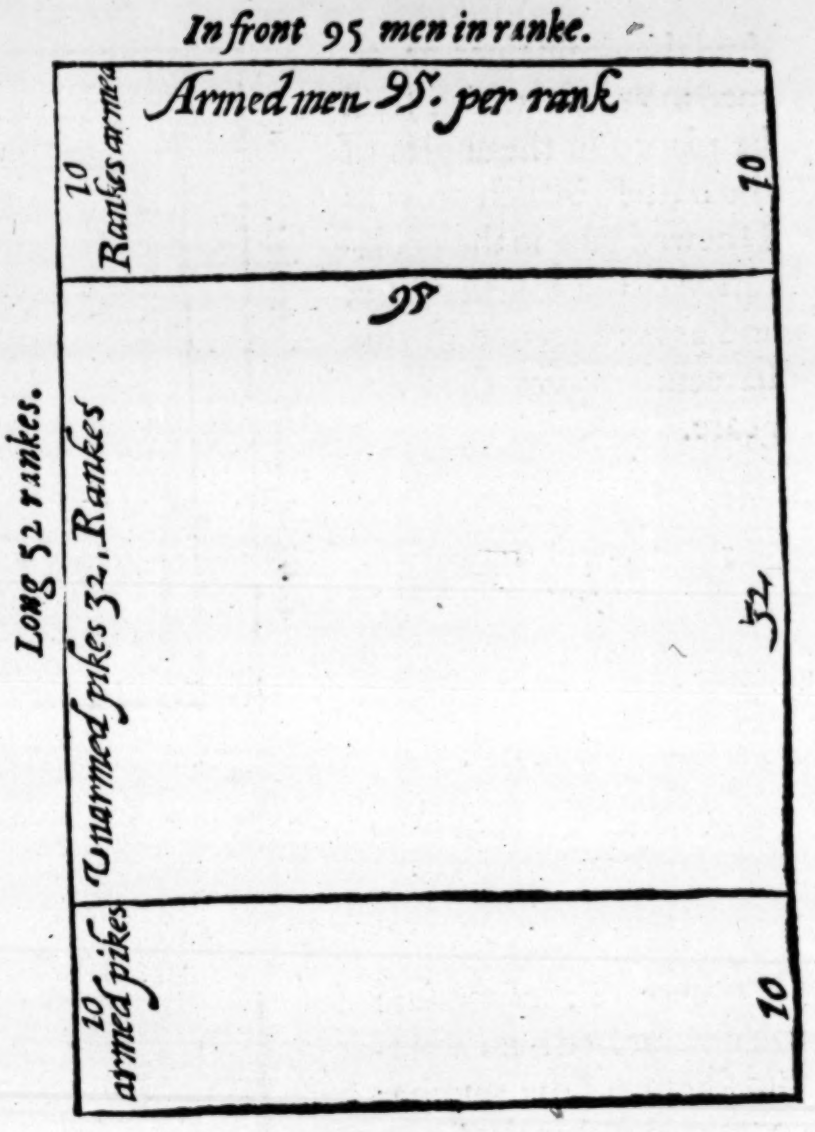
The 13 figure.

In front 95 armed pikes.



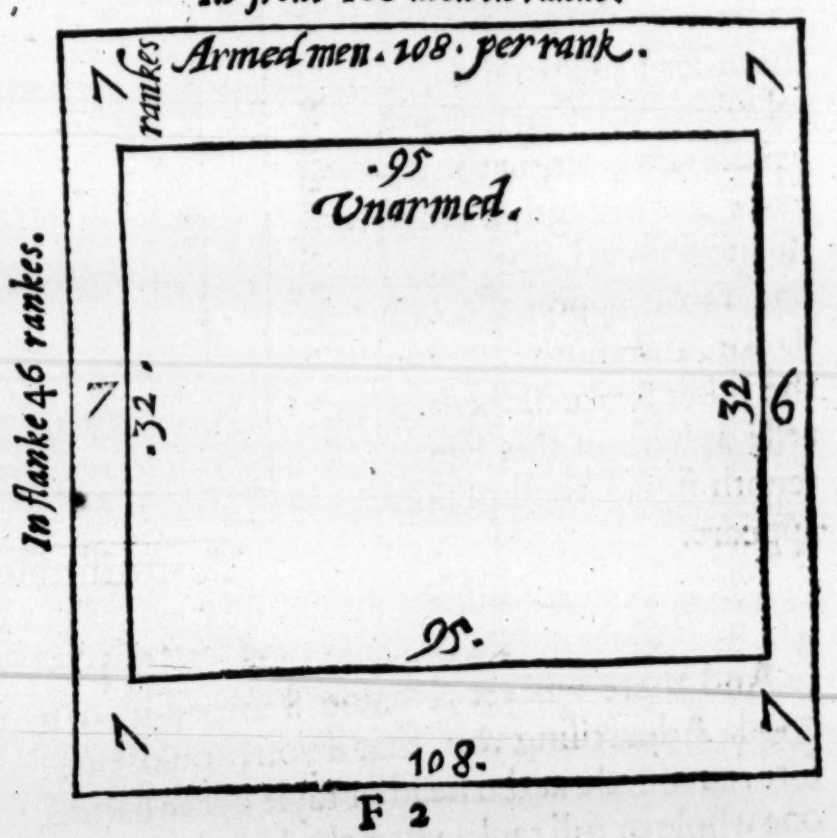
The 14 figure.

And as the Arraies of the vnarmed Pikes ſhall be placed ſhoulder to ſhoulder one of another, at the backes of the firſt 10 rankes of the armed Pikes; then the Officer which ſtãdeth with the armed pikes for the traine, ſhall drawe forth 95 rankes, at 10 men per ranke of armed pikes, and place them with their ſhoulders to the backes of the vnarmed pikes, as in this 14 figure ſhall appeare.



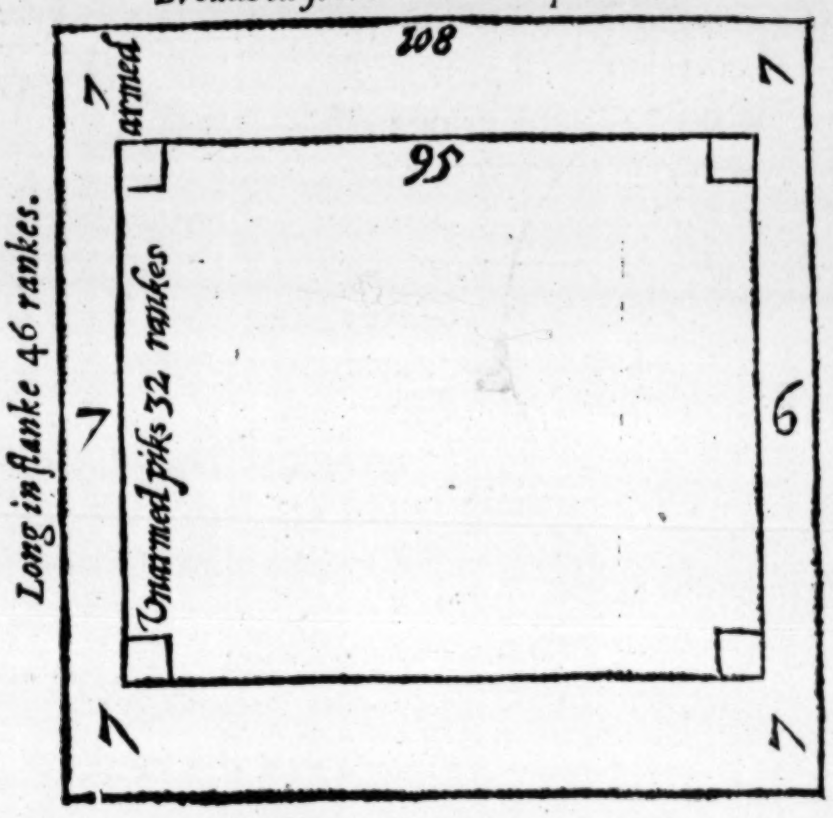
The 15 figure.

This being done, let the Officer of the Vanguarde draw out three rankes of the armed pikes, and arme the one flanke at 7 men in ranke; and he that is at the Reregard, let him take 3 ranke of his armed pikes, & arme the other flanke, at 6 men in ranke, as in this fifteenth figure appeareth.



The 16 figure.

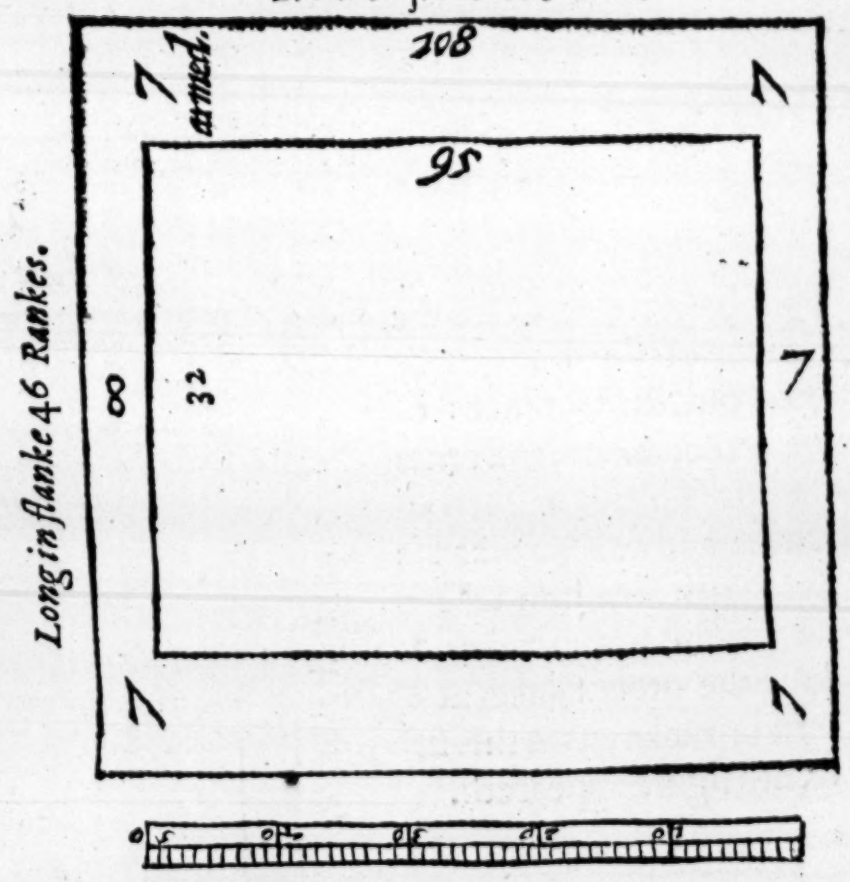
Broade in front 108 *men per ranke.*



And there remaines 72 armed men: the which ſhall be placed in the angles of the Battell, in ſuch order as I ſhewed you in the declaration of the fourth figure; and as here againe in this ſixteenth figure ſhall appeare.

The 17 figure.

Brode in front 108 *men.*



A ſcale of 50 paſes, of 5 foote to euery paſe

Or otherwiſe accõmodate thoſe 72 armed men aforeſaid (being of the number contained within the bodie of the battel) thus: let there of them be made 2 rankes, to ſet vntó the one or vnto the other flanke of the battel, where you ſhal ſee moſt need & occaſion, for the defence and ſtrength thereof. But now they ſhalbe placed one ranke vppon the one flanke, and another vppon the other flanke of the battell; as here in this ſeuenteenth figure ſhall plainly appeare.

And there will yet remaine 8 armed men, to place where you ſhall thinke good. Aduertiſing you, that if you ſhould haue ſet the 72 armed men which before remained, at the head or tayle of the battell, it would not haue reached vnto one whole or full ranke vnto the breadth of the battell: for an intire ranke of the

inner part of the battell in breadth is 95 men, that is, ſo many as the breadth of the vnarmed pikes do containe. Thus the battell declared by the aforeſayd 17 figure will be in length 46 rankes, at 108 men *per* ranke in breadth, with the 7 rankes of armed pikes in the front, and 7 rankes in the reareward, and with 8 men *per* ranke of armed pikes on the one flanke, and 7 men by ranke of armed pikes on the other flanke, as in the aforeſayd 17 figure appeareth, with the 8 men which remained, placed in the body of the battell.

Gent. Aſſuredly (Captaine) this order ſeemeth wonderfull good. But now vnto the other two orders which you ſpake of.

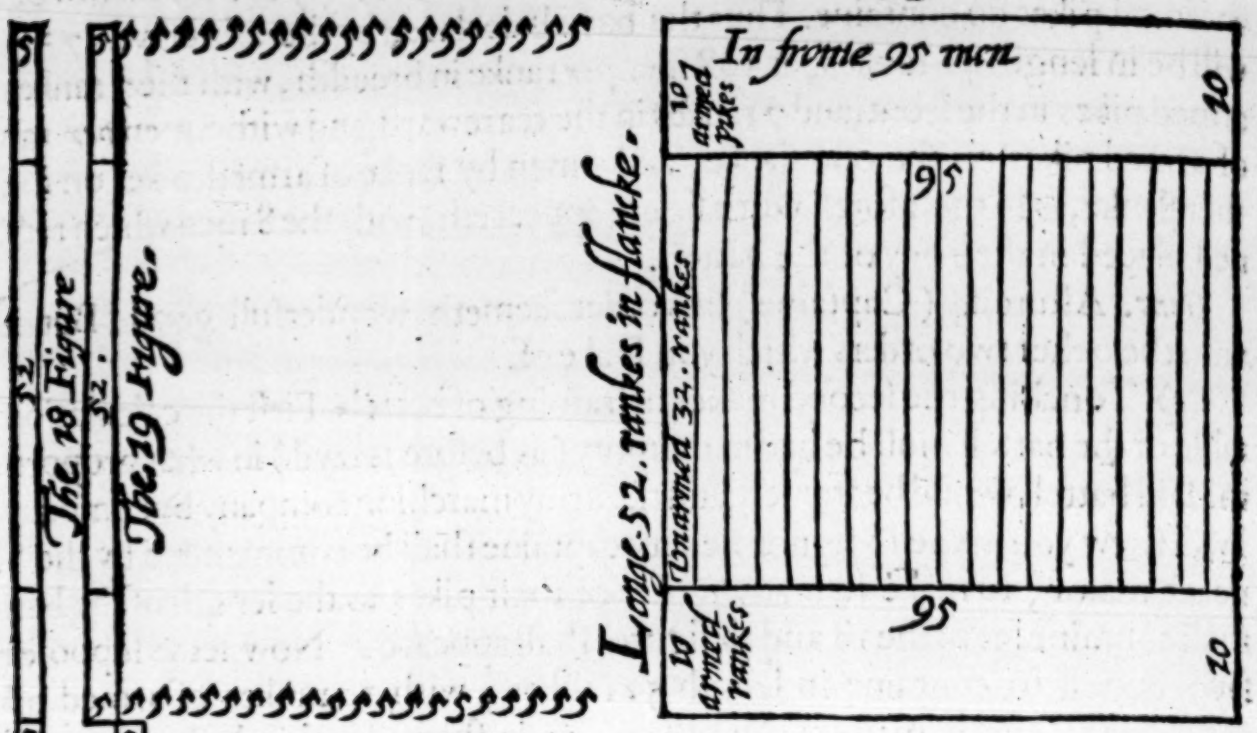
Cap. Touching the ſecond maner of framing of battels. Firſt the calculation or table of the battell muſt be had in memory (as before is ſayd) in what proportion the ſaid battell would be framed, and the army marching company by company, as I will ſhew you in the 18 figure: euery captaine ſhall be commanded by the Sergeant maior, to make ſo many rankes of their pikes as the length of the battell ſhall containe, as in the 18 and 19 figures ſhall appeare. Now let vs ſuppoſe the ſayd battell to containe in length 52 rankes, with 10 rankes of armed pikes at the head, and as many at the trayne, as is ſhewed in the declaration of the ninth and 14 figures, and that euery Captaine doe make 52 rankes, with 10 armed pikes before, and 10 behind, as in the 18 figure is ſhewed. And if any Captaine be found which hath not to accompliſh that number, let him ioyne with another Captaine, and betwixt them both let them make vp that number of 52 rankes. This being done, Captaine by Captaine ſhall ſet their rankes ſhoulder to ſhoulder the one of the other, and ſhall ſo frame the battell 52 rankes in length, with 10 armed pikes by ranke before, and 10 behind. After that ſhall bee framed the battell, as I will ſhew you in this 20 figure following. This being done, one of the 4 Caporals of the field, ſhall go vnto the head, and another vnto the reareward: then he which is at the head, ſhall take away from the front of the battell 3 rankes of armed pikes, and arme therewith one of the flankes, at 7 men *per* ranke in length, adioyning vnto them the 28 armed pikes, which he lacketh to furniſh out the length of 46 rankes at 7 men *per* ranke, as is ſaid in the declaration of the 9 figure.

And the other Caporall or officer, which is at the traine of the battell. He alſo ſhall take away or draw foorth from the traine 3 rankes of armed pikes, and arme with them the other ſide or flanke, at 6 men *per* ranke, in length of 46 rankes. So ſhall the battell bee formed 46 rankes long, at 108 men *per* ranke in front or breadth, with 7 ranks of armed pikes in frõt, & as many in traine, & with 7 armed men *per* ranke on the one flanke, & with 6 men by ranke, on the other flanke armed pikes: as I ſhewed in the 8 figure of the table and alſo in the 21 figure following.

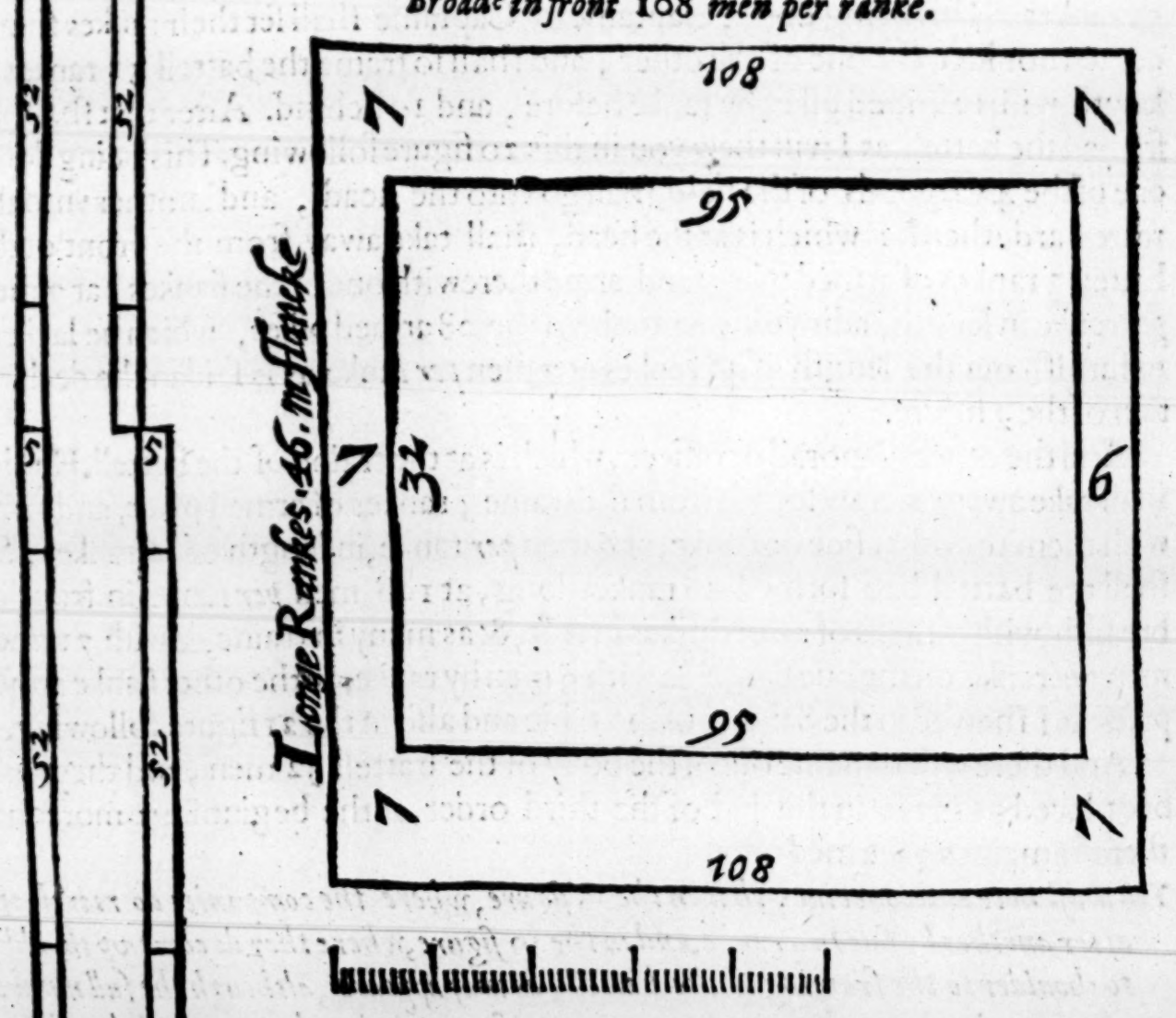
And there will remaine out of the body of the battell 32 men, and they ſhall bee placed as I ſayd in the laſt of the third order, at the beginning: moreouer there remaines 72 armed men.

You muſt note and conceiue, that in the 18 *figure, where the companies do march one after another by fiue in a ranke, and in the* 19 *figure, where they do come vp ſhoulder to ſhoulder to the framing of the battell, as may appeare, although the full number of companies do not there appeare, as is requiſit: yet it is to be conceiued that they do conſequently one follow another, but want of rome in paper cutteth them off.*

The 20 figure.



The 21 figure.
Broade in front 108 men per ranke.



And

And the 72 armed pikes remaining, which are of the number contained within the body of the battell, ſhall be placed either in the foure corners of the vnarmed pikes, as in the 16 figure may be ſeene; or elſe in each of the two ſides or flankes, as in the 17 figure appeareth, where there is one ranke adioyned vnto the one flanke, and another vnto the other flanke; or elſe you may arme and ſtrength with the ſame 72 armed pikes, any one of the flankes, as neede or occaſion ſhall require.

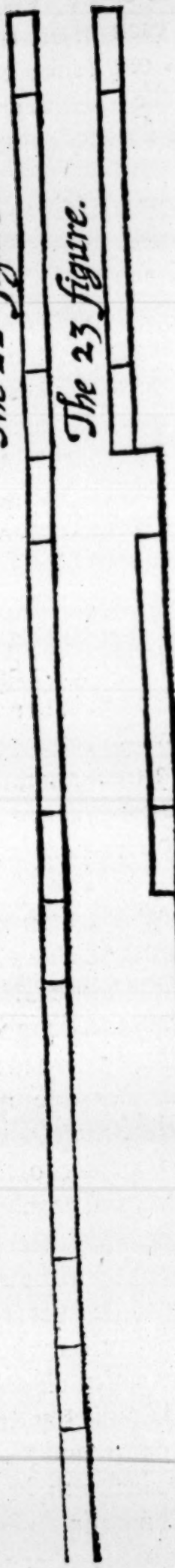
Gent. You haue deſcribed the firſt and ſecond order of imbattailing excellent well, in mine opinion, therefore (I pray) proceede to the third.

Capt. The maner of the third order is thus, When the armie is cauſed to march *Maniple* by *Maniple*, with their armed pikes in vantgard and rearegard of euery particular *Maniples*; and with one *Maniple* all of armed pikes, which marcheth in the vantgard of the *Maniples* which haue their vnarmed pikes in their middle or center: the which *Maniples* of all armed pikes, is that which ſerueth to arme the one flanke of the battell. Beſides this, there marcheth another *Maniple* of all armed pikes, after all the *Maniples*; and this *Maniple* ſerueth to arme the other flanke of the battell. And the *Maniples* muſt march the one after the other, as in the figure appeareth. *The third order by marching maniple by maniple.*

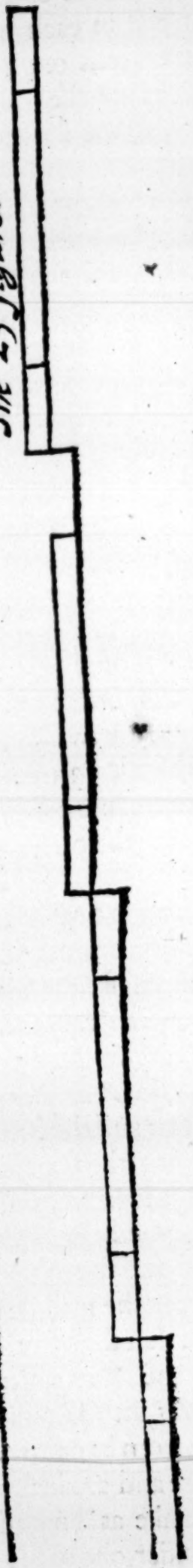
Now, there reſteth how to bring thoſe into *Maniples* of this laſt order, which do march in the full length of the battell, with their armed pikes in front and traine; the which ſhalbe done in this ſort. Let it be ſuppoſed (as the 17 figure of the ſecond order doth ſhew) that there ſhall be drawne foorth 15 men in ranke of armed pikes in length of the battel, which ſerue to arme the two flanks, out of 108 men *per* ranke, the breadth of the battell, there reſteth 93 men *per* ranke for breadth or front. And theſe 93 muſt be diuided into ſo manie parts, as one would that the *Maniples* ſhould march in ordinance or arraies, the one after another, as the way will permit.

Now ſay that I will haue the *Maniples* to march by 5 in a ranke, then muſt I deuide the 93 (the breadth of the battell) by 5, whereof commeth *Maniples* 18, which ſhall containe in length rankes 46 at 5 men in a ranke; and one *Maniple* remaining at 3 men *per* ranke; the which *Maniple* is alſo 46 rankes in length, at 3 men in rankes. Notwithſtanding it ſhall march (in marching) at 5 men in ranke after all the *Maniples* aforeſayd. And the 18 *Maniples* doe march with 7 rankes of armed pikes before, and 7 rankes after: and the *Maniple* of 3 *per* ranke, ſhall, at the time of ſetting the battell, diſtend to the ſhoulders of the other *Maniples* at 3 *per* ranke, with 7 rankes, armed pikes in front, and 7 rankes armed pikes in trayne. And the other two *Maniples* of armed pikes, which ſerue to arme the two flankes, the one marcheth in the vantgard, and the other in the reareward of the *Maniples* which haue their vnarmed pikes in the middle (yet at 5 in ranke) as appeareth in the 22 figure, and at the inſtant that the battell is to be ſet, the Sergeant Maior ſhall accommodate and faſten the *Maniples* of all armed pikes, that marcheth in the foreward of all the *Maniples*, into 46 rankes, at 8 men armed *per* ranke, and the other *Maniples* ſhall follow from hand to hand, pouldron to pouldron, the one to the other, as the 23 figure and 24 declareth, beginning with the armed *Maniple*, which armeth the flanke at 8 men in ranke by length. Theſe *Maniples* thus brought ſhoulder to ſhoulder, one to the other, then

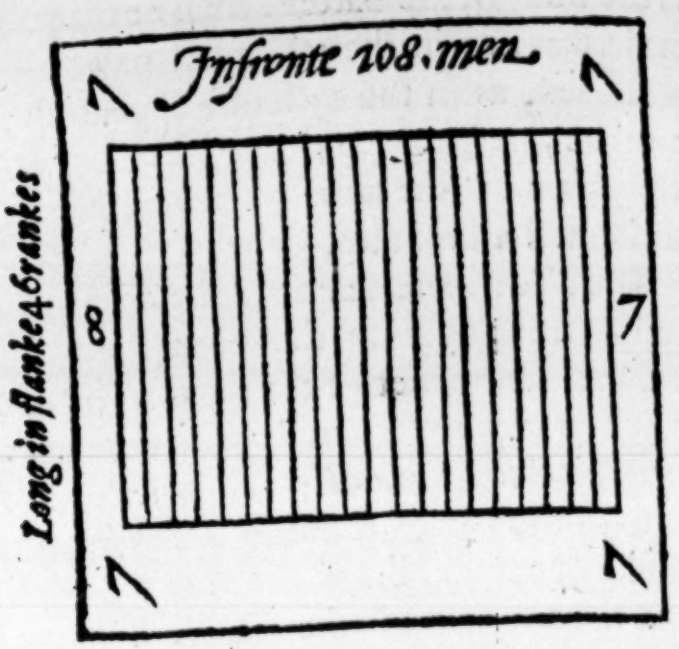
The 22 figure.



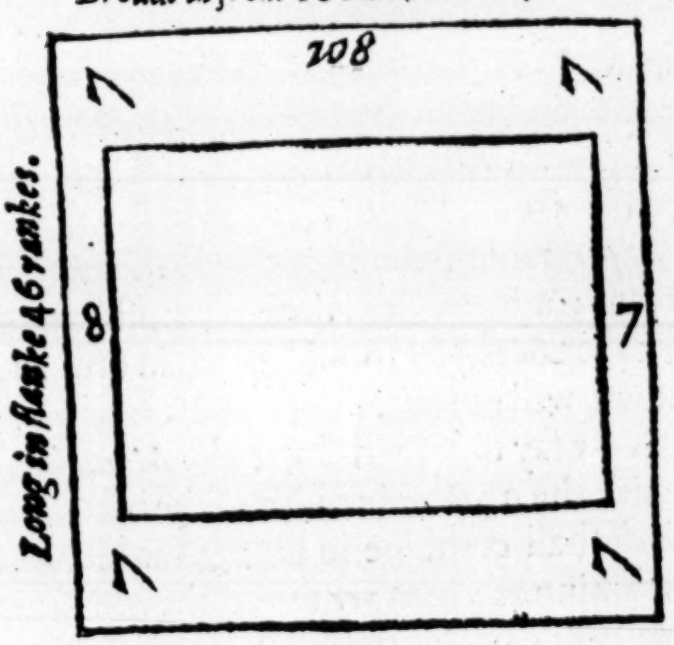
The 23 figure.



The 24 figure.



The 25 figure.
Broade in front 168 men in ranke.



ſhall follow that *Maniple* of and *per* ranke (the which yet marcheth at 5 *per* ranke in array) and ſhall diſtend vnto the ſhoulders of the other *Maniple*, at 3 *per* ranke, with 7 armed pikes in front, and 7 in traine. After all this ſhall follow the other *Maniple* of all armed pikes, and ſhall ſtretch foorth vnto 7 in a ranke vnto the ſhoulder of the other *Maniples*, to arme the other flanke of the battell. And thus is the battel framed 46 rankes in length, at 108 men by ranke in breadth, with 7 rankes of armed pikes in front, and 7 in traine, and with 8 armed pikes in ranke, on the one flanke, and 7 in a ranke on the other flanke, of armed pikes, as in the 24 and 25 figures: and there remaines 32 armed pikes, the which ſhall be placed as I ſaid before, in the laſt maner of the third order.

Aduertiſing you, that although I haue giuen order and examples to arme the front, traine, and both flankes of the battell, in forme and manner as I haue ſet downe in the 24 and 25 figures, with placing the armed pikes which remained out of them which armed the front, traine, and both the flankes of the battell, in the angles & flankes of the ſayd battell, as by their ſeuerall figures may be ſeene; yet, notwithſtanding the aforeſayd examples, they may be placed where moſt neede and occaſion ſhall ſerue to ſtrengthen the battell, either in front, in traine, or in any flanke. So may you alſo, as occaſion ſhall require, ſet more armed pikes vpon any part, for the more ſtrength and ſecuritie of the battell. And this much may ſuffice, touching the body of a formed battell. Next enſueth, the fierie weapons, Muskets and Caliuers, how they ſhould be placed.

Aduertiſement.

Fierie weapons.

Gent. I pray let vs vnderſtand the order of them alſo.

Capt. As the armed pike is the ſtrēgth of the battell, ſo without queſtion, is the ſhot the furie of the field: but the one without the other is weakened the better halfe of their ſtrength. Therefore of neceſſitie (according to the courſe of warres in theſe dayes) the one is to be coupled & matched with the other, in ſuch conuenient proportion, that the aduantage of the one may helpe the diſauantage of the other. For a ſtand of pikes, though neuer ſo well armed, being charged & aſſailed with the like, or a leſſe number of ſhot, by euery mans iudgement would haue the worſe, & not able to abide the field, vnleſſe they had ſhot, to anſwer their enemies ſhot. In like ſort, any troupe of ſhot, though neuer ſo braue & expert, being in open field, hauing no ſtand of pikes, or ſuch other weapō, nor hedge, ditch, trench, or rampier, to relieue and ſuccour them, could not long endure the force of horſe, eſpecially Launciers. Now the due ſortement and matching of theſe weapons to offend, and defend, and to aide one another, as aboue is ſayd, of the beſt experimented is accounted thus: Vnto euery 100 men, to haue one third pikes (with ſome few ſhort weapon) and two thirds Calliuers.

The armed pike is the ſtrength of the battell, ſo is the ſhot the furie of the field.

Shot and pikes of neceſſitie to be coupled.

The one without the other of no great force.

The ſortement of theſe weapons, offenſiue and defenſiue.

But were the one halfe (or more) of your ſhot, Muskets, as the *Spanyardes* moſt commonly now vſe, and ſo to be wiſhed with vs alſo, then leſſe number of ſhot would ſerue and more of pikes, (as I ſayd at the beginning of our diſcourſes.) For euery Musket, conſidering the wonderfull execution of that weapon, may be valued for two Caliuers. Touching the placing of theſe fierie weapons about the body of the battell, there hath bene, and yet is, ſundry opinions. Of ſome of them I haue already ſpoken in theſe diſcourſes, namely, of lyning of battels with ſhot, or ſhort weapon, by me diſliked; hauing there declared my reaſons for the ſame.

The aduantage of muſket.

But before I come to the placing and ordering of ſhot (for being a weapon not skilfully and warily vſed, is of more daunger to our ſelues then to the enemy

notable ouerſight of our ſhot in charging and diſcharging their peeces.

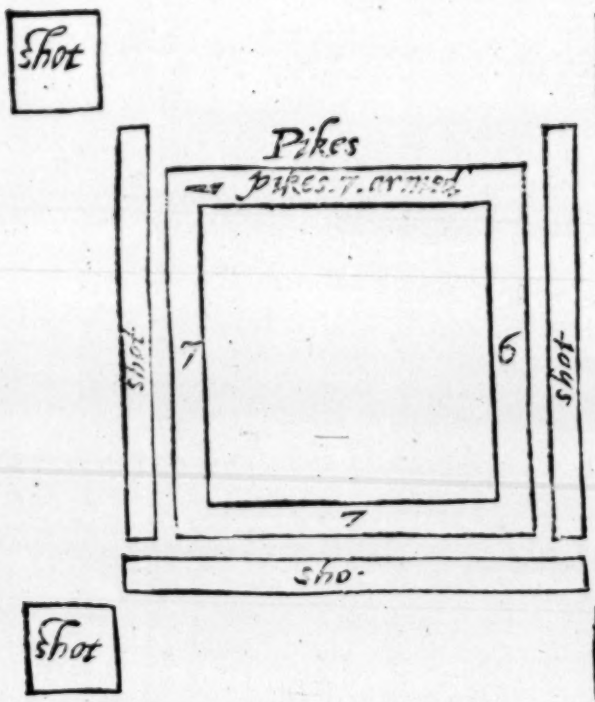
ſometimes) I will put you in minde of one notable ouerſight in our ſhot (eſpecially of the crooked ſtockt Calliuer;) For many ſouldiers ouer-curiouſly carrying and conueying their peece with the noſe downeward, and ſtriuing to be ſeene nymble and quicke in diſcharging, (not conſidering that one ſhot well beſtowed, auayleth many vnaduiſedly ſpent,) haue let ſlipt the bullet out of their peeces barrell vpon the ground, before the diſcharging thereof. Whereby it commeth to paſſe many times, that an hundred ſhot, hauing in skirmiſh diſcharged their peece three or foure times a peece, againſt two hundred of the enemies, and ſcarce ſlaine two of them. A great indiſcretion, & to be better regarded and amended; the which may eaſily be done thus, either after hauing charged and ſlipt the bullet out of his mouth into the barrell of the peece, by mounting the noſe thereof ſomewhat vpward, holding his peece firmely with his left hand, or elſe by ſtopping after the bullet, which is eaſily done, onely by putting two or three cornes of powder into the peece after the bullet.

A redreſſe and eaſie way, how to faſten the bullet.

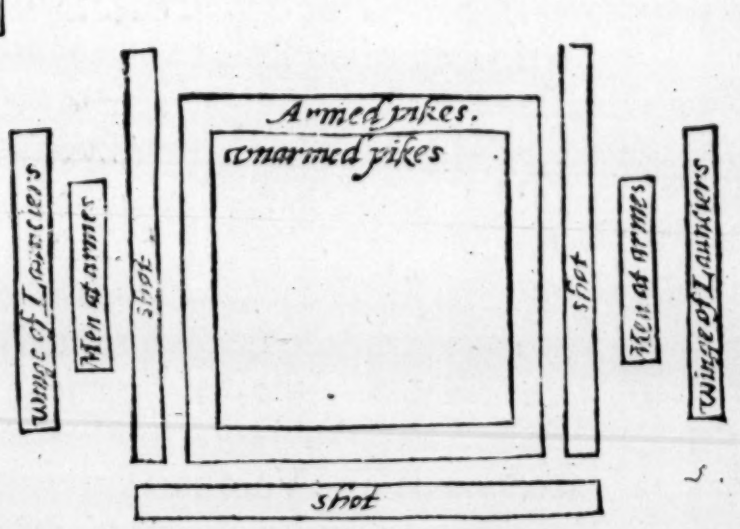
How ſome do vſe to place their ſhot about the battell of pikes.

In placing the ſhot about the battell, ſome do vſe to flanke the two ſides of the battell with ſleeues of ſhot, by 11, 13, 15, or 17 in a ranke, or more or leſſe, as they ſhall thinke good; and place the ſayd ſleeues of ſhot, 10 or 12 foote diſtant from the armed pikes; and the reſt of their ſhot in 4 great troupes at the angles of the battell, without the ſayd ſleeues, ſeruing for hornes or wings vnto the battell, and the horſemen to be placed without them againe, as in theſe figures following appeareth.

The 26 figure.



The 27 figure.



A better order to diuide your ſhot into troupes.

To girdle the ſtad of pikes with ſhot.

But (in mine opinion) this order is not ſo good, as if the ſhot were deuided into ſundry ſmall troupes, trouping round about the battell the one to ſecond the other: placed in forme as hereafter ſhall follow thus. Firſt, your graund ſquare (or more battailions if you will) being ſet, then impale or girdle the ſame round about with ſhot, by 3, 5, or 7, or more, in a rank (according to the proportiõ of the battell, neare adioyning vnto the armed pikes, to be by them guarded from the horſe,

horſe, if neede were; The reſt of the ſhot deuide into many ſmall troupes by 30 40, or 50 in a troupe, to troupe round about the battell, with ſome reaſonable diſtance from the ſame, to maintaine skirmiſh or fight which way ſoeuer the enemie approch: Prouided that the ſame troupes be ſtill maintained, one to ſecond another, that the battell may be by them ſhadowed, to the end that the skirmiſhes or troupes of the enemies may not haue that aduantage, to play with their ſhot vpon your battell: for hee is but a fooliſh ſhot, that ſhooteth at, or among light skirmiſhers, where he may diſcharge vpon the body of his enemies battell, which ſtandes thick together, and is a fayre marke to ſhoot at; for the armed pikes once ouerthrowen, which is the ſtrength of the field, the victorie by all likelyhood is like to enſue.

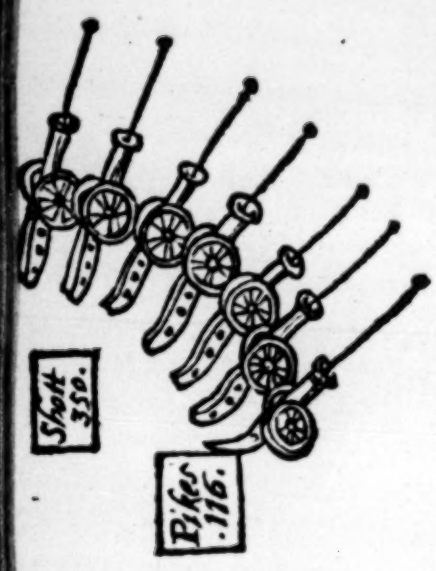
The ſhot in ſmall troupes, one to ſecond an other.

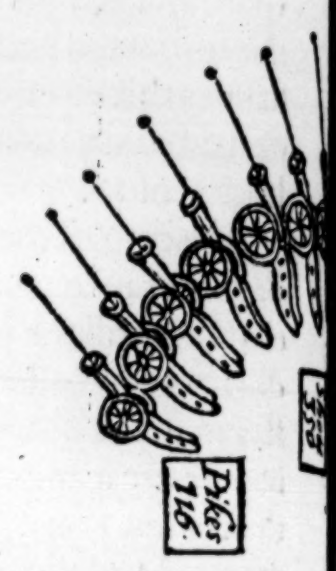
The armed pikes once ouerthrowen the battell ſtands in hazard.

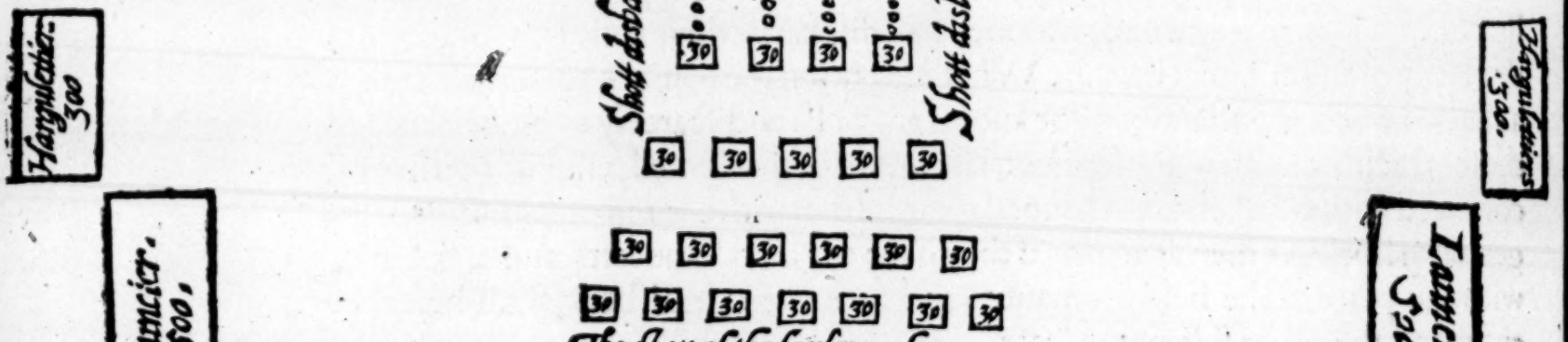
The empalement, eſpecially in the front, I would wiſh to be Muskets, ſome 3 or 5 in a ranke, according to the greatneſſe of the battell; and thoſe not to diſcharge, vntill the battels approch within 20 paſes diſtant, and then throughly to diſcharge in vollie vpon the face of the enemy: the which cannot chuſe, but muſt ſlay many, and wound a number in the enemies front; the effect whereof ſhall breede great encouragement vnto you, and diſencouragement, and weakening to the enemy. You may alſo (if you pleaſe) place at euery corner of your battel a ſquadron of Muskets, neare vnto the girdling ſhot, at 50 Muskets in each ſquadron, or as occaſion ſhall require; who, vpon the enemies battell approching, wheeling a litle about, in forme of a halfe Moone, ſhall diſcharge their volly all at once, vpon the body of the enemies battell. What execution the Musket performeth, ſuch as haue bene in good actions doe know very well; and ſcarcely to be beleeued of thoſe which neuer ſaw any ſeruice. The figure of this battell, empaled with ſhot, cornered with Muskets, and trouped round about with the reſt of their ſhot, winged with horſe, as men at armes (if they haue any) and Launciers, and light horſe, with the place of the field ordinance, and forlorne skirmiſhers, ſhall hereafter enſue, on the other ſide of the leafe.

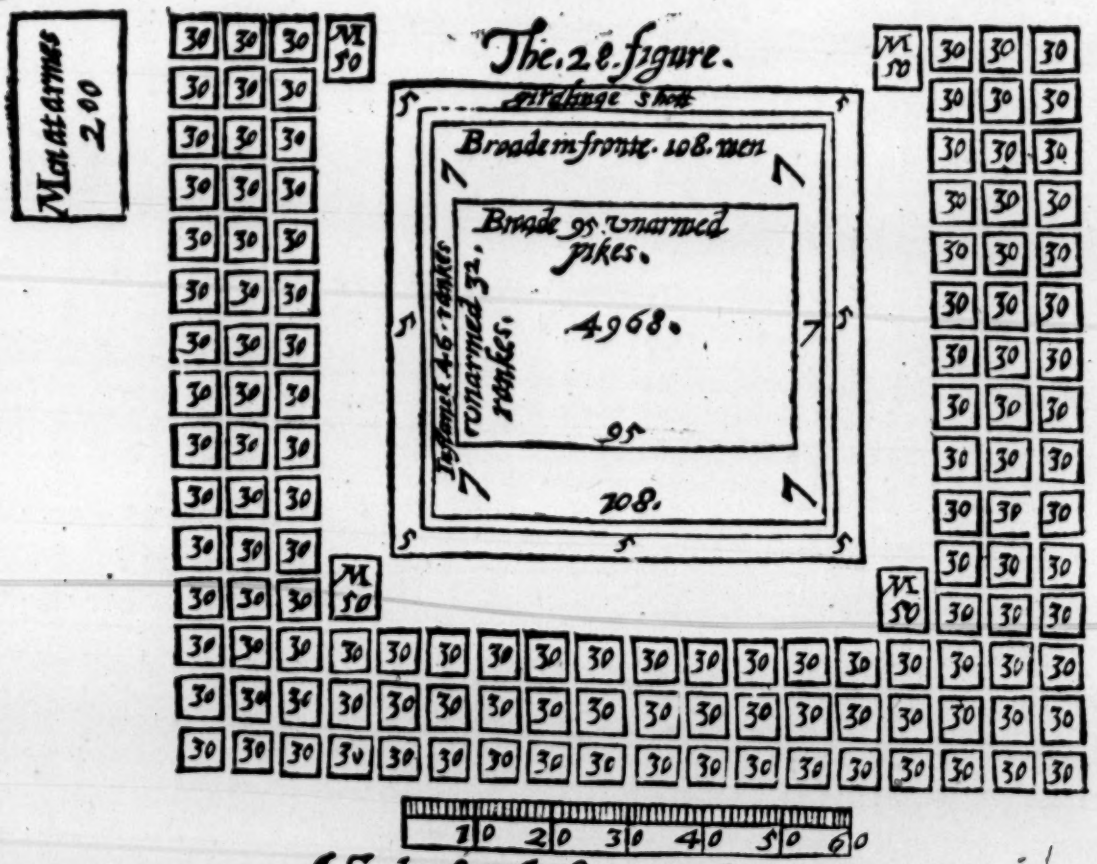
The girdling ſhot to diſcharge at 20 paſes off, and not farther.

The imbattailing of 5200 pikes, armed and vnarmed, short weapon 1300, muskets 3250, calliuers 3250. And of armes, 400: and Launces 1000, and 600 hargulutiers, with 14 field peeces.









A Scale of 60. passes at 5 foot to euery pase.

And if you would fight with the ſame number of men in ſundry battallions of the ſame kind; deuiding them into 3 battallions, diſtinguiſhed by vangard, battell, and reareward, worke thus: firſt deuide your grand number of men, which is 4968, by 3 and the product will be 1656 men for euery battallion. Now, to frame their battallions in the ſame proportion that your grand ſquare was of, which was, as 7 to 3, couch downe your number thus: 7——3——1656. Multiply, and deuide, and the product will come foorth 709, of the which extract the cubike roote, which is 26 men for the length or depth of the battallion; by this 26 deuide the number of men for your battallion being 1656, and the product will bee 63 men, for the breadth or front of each battallion. Now the order to march theſe battallions vp to fight (wherein muſt be conſidered the ground, and diuerſe other aduantages) the one to ſecond the other, behold here in figure, where the vangard (being formoſt) hauing encountred the enemy, and finding themſelues weake, retireth orderly, and the battell aduanceth, who ioyning with the vangard, do both together giue a ſecond charge, & being yet diſtreſſed, the reareward marcheth vp cloſe by the battell, & renew the fight a freſh; of the which order of battell, and battallions, there ſhall be both figures & tables extant in our laſt booke. The ſhot & horſe belonging to theſe numbers, are to be deuided, and placed by the Campe-Maiſter Generall, and Sergeant Maior Generall, on grounds of moſt aduantage.

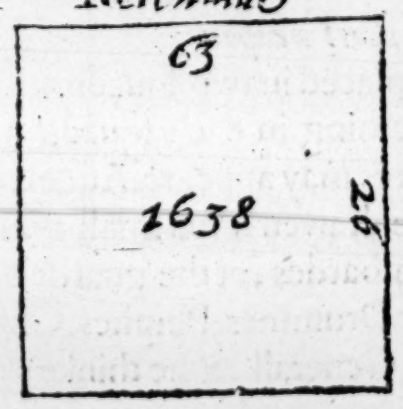
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4968 (1656
3333
7—3——1656
3
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777
26
4
(1
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49(8
2656(63
266
2



Battaill



Rereward



or if it be thought good, the vantgard may be placed in the middle, the battell on the right wing, and the reareward on the left wing; as the ground, occaſion, and the commanders opinion ſhall concurre, and euery battallion to haue his proportionall ſhot deuided into ſundrie troupes, the one to ſecond another, as before appeareth.

A particular declaration of the former battell in figure.

In the before figured battell, I haue placed and ſet downe the ſhot, and ſhort weapons, belonging vnto the proportion of the ſaid battell, as here following ſhall particularly be declared.

The battell or body of pikes.

Firſt, the battell or bodie of pikes, armed & vnarmed (containing in number 4968, as in the figure before appeareth) I haue framed in proportion of inequalitie, being $2\frac{1}{3}$ times more in breadth then in length in number of men (called commonly a broad ſquare) which is in proportion as 7 to 3, which proportion couereth the due quadrate of ground, as before I haue at large recited, being impaled round about with 7 rankes of armed pikes, at 108 men *per* ranke in front, and 46 rankes in flanke. For the furniſhing of which battell with ſhot, and ſhort weapon, in due proportion to the ſame, I haue preſuppoſed this courſe and order following; after the rate to euery 100 men; 40 pikes, 10, halberds and ſhort weapon, 25 Muskets, & 25 Calliuers. Which battell conteineth pikes 5200, (whereof is within the body of the battell, 4968 pikes) halberds and ſhort weapon 1300, Muskets 3250, Calliuers, 3250; being in all 13000 men ſorted and ſuted with weapons as appeareth, and ſeuerally placed to fight (as I ſuppoſe) to moſt aduantage, thus.

Impaled with armed pikes.

The ſortement of the weapons.

Girdled with muskets.

Firſt the body of the battell containeth pikes 4968 armed and vnarmed; being 108 in front, and 46 rankes in flanke; the which body is inuironed or girdled with Muskets at 5 in ranke round: 1640

4 Squadrõs of Muskets, at the angles of the battel, at 50 *per* ſquadron. 0200

Shot in troupes.

30 Troupes of ſhot, on the one flanke, at 30 in a troupe, amounteth. 0900
30 Troupes of ſhot on the other flanke, at 30 in a troupe, amounteth 0900
17 Troupes of ſhot, in the forlorne hope, at 30 in a troupe, amounteth 0510
46 Troupes of ſhot, in the reareguarde, at 30 in a troupe, amounteth 1380

Summe totall of the shot beſtowed about the battell. 5530

More ſhot is beſtowed about the guarde of one part of the artilliarie 0350
More ſhot placed in guarde of the other part of the artilliarie 0350
Finally there is ſhot left to guarde the munition, ſumme. 0270

Thus you ſee the whole number beſtowed, amounts 6500

Halbards and short weapon 1300 *beſtowed as followeth.*

Halberdes and ſhort weapons.

06 Troupes ſhort weapõ, mingled with the ſhot on the one flank at 30. 0180
06 Troupes ſhort weapon, mingled with ſhot, on the other flanke at 30. 0180
05 Troups ſhort weapõ, mingled the forlorne hope, ſhot at 30 in tr. o. 0150
08 Troups ſhort weapõ, mingled with the ſhot in the reareguard. at 30. 0240
More ſhort weapon with the one part of the artillerie to guard 0200
More ſhort weapon with the other part of the artillerie 0200
Finally the reſt of halbardes and ſhort weapon, are with the munition 0150

Thus alſo is beſtowed the whole number of short weapon 1300

The remaines of the pikes where placed.

Finally, there remained 232 pikes, the which are placed in two ſquadrons, with the reſt of the halbardes and ſhort weapon, containing in each ſquadron 116 pikes and 200 ſhort weapon as in their ſeuerall figures may appeare. Aduertiſing moreouer, that out of the body of the battell may be drawen ſome ſmall number of pikes, to be employed with the other pikes and halbardes, at the guarde of the artillerie and munition: which roome ſhall ſerue for Drummes, Phiphes, Chirurgians, and hurt men: where alſo is the place of the Generall, if he thinke good;

To draw ſome pikes out of the center of the battell.

But

But with this prouiſo, that you draw not ſo many pikes frō the heart of your battell, that you leaue the ſame heartleſſe.

To conclude; The ſaid battell is winged with 2 ſquadrons of men at armes; at 200 in each ſquadron, with 2 troupes of Launciers, at 500 in euery troupe; and with 2 troupes of hargulutiers, and other ſhot on horſebacke, at 300 horſe in euery troupe. And before them againe is placed 14 peeces of field ordinaunce, in two parts, hauing by them their guardes of ſhot and pikes, as appeareth.

Men at armes.
Launciers.
Hargulutiers.
Great ordinaunce.

Thus haue you here ſeene in figure the embattailling, and beſtowing of 5200 pikes, 6500 ſhot, and 1300 ſhort weapon: and of 400 men at armes, and 1000 Launciers, and 600 hargoletiers, imbattailled and placed, and ready engaged to fight, as particularly aboue appeareth.

The number of each.

Gent. Truly, for mine owne part I haue litle skill to iudge, but in mine opinion, this ſeemeth wonderfull ſtrong for one battell: but me thinkes, you haue framed your battell of more men in breadth then in length.

Capt. So it is; For I haue ſet 108 men in breadth, and 46 rankes in length: the reaſons thereof I ſhewed you before: for by this meanes there commeth more hands at once to fight in front, and the flankes notwithſtanding ſufficient ſtrong, eſpecially hauing any aduantage by the ſeat, which battell commeth to be an equall ſquare of ground, and a broad ſquare of men, in proportion of inequalitie, as 7 is to 3, that is two times, and a third of men more broad then long.

The broad ſquare battell bring the moſt hands at once to fight in front.

The ſquare of ground.

But for theſe formes of battels, as they bring moſt hands to fight at once; ſo are they not equally ſtrong on each ſide, as is the iuſt ſquare of men: wherefore it behoueth the leaders thereof, to haue a care to the ſituation of the ground, and to procure (as neere as they can) that the enemie may charge but in the front, ſo ſhall they be wonderfull ſtrong either againſt horſe or foote. And to encounter any foote enemie (for no great force of enemies horſe may be brought into one Ile, I ſuppoſe) no forme more ſtrong then this, for one onely battell.

A care to be had to the ſituation of ground.

Gent. Why, are there vſed more battels then one in one fight?

Capt. Yea truly, and with great reaſon and aduauntage, were men experte and skilfull. For as it is venturous to ſet ones fortune vpon the brunt of one ſole battell, ſo is it daungerous to frame many batallions, except men be very skilfull and well practiſed therein, by reaſon of the difficultie in ſeconding one another. And againe it is rarely ſeene in our dayes, that men come often to hand-blowes, as in old time they did: For now in this age, the ſhot ſo employeth and buſieth the field (being well backed with a reſolute ſtand of pikes) that the moſt valianteſt and skilfulleſt therein do commonly import the victorie, or the beſt, at the leaſt wiſe, before men come to many hand-blowes.

Venturous to ſet al our fortune vpō the brunt of one ſole battell.
So is it daungerous for vnexpert men to fight in ſundry battalions.
Men come not often to hand blowes, as in old time, the ſhot ſo imployeth the field.

Gent. But your battell thus framed, and engaged to fight, what order take you therein then?

Capt. It is hard for any man to giue any direct courſe, before the enemie bee knowen and ſeene. For the occurants of warre bee ſo manifold and ſtrange, that ſometimes vpon a moment, the firſt reſolutions and courſes taken are to be altered: as was well to be ſeene in our actions with the *Spanyardes* in anno 1588 at ſea. Where our firſt determinations and appointed orders, were vpon our ioyning with the enemie quite altered, and chaunged; and ſo changing dayly, as occaſions were offered. And in land ſeruice more occurrantes do befall hourely,

Hard to aſcerteine any courſe of fight before the enemies order be knowen & ſeene.
Occurrants of warre be manifold and ſtrange.

which hereafter we will ſpeake of.

The ſhot on horſe backe cõmonly begin the firſt skirmiſhes.

At the field ordinance doe commonly begin the firſt puzzeling.

The forlorne hope to disband, and hauing skirmiſhed to retire to the flankes.

One troupe of ſhot to ſecond an other.

But now partly to anſwere your demaund: Firſt the enemie diſcouered, approching, and engaging vs to fight, happely ſome skirmiſhes may be begun by the hargoletiers and light horſe; but the battels approching and comming within ſhot, the field ordinance, on both ſides (if there be any) begin to go off, at which artillerie the firſt puzzelling doth commonly begin, each part attempting to ſurpriſe the others ordinance: then the looſe ſhot in the forelorne hope on both ſides begin to disband and fall to flat skirmiſh: their office performed, hauing bene well bearded, they retire to the flankes and reareward of the battell, from whence they are ſupplied and continually ſeconded with other freſh troupes, ſo ſtill maintaining fight, till the horſe do offer to charge, the which are commonly encountred with horſe againe: if not, then the ſhot retire behind their ſtand of pikes, and are then alſo aided with their halberdes and ſhort weapon, and ſome halfe pikes mingled among them; vpon whoſe charging, the Muskets of impaling and the ſquadrons at the angles doe roundly beſtow their vollie in the face of the enemie, then the pikes are couched faſt vnder the right foote, guarding the girdling ſhot vnder their ſuccour; the which girdling ſhot, are to kneele vpon their right knee vnder the couched pikes, & cloſing cloſe together do ſtãd with reſolute hart, hand, and body, holding the pike at a reaſonable diſtance, in the left hand, & their ſwordes ready drawen in their right hand of the firſt 3, or 4, rankes, being ſure to ſtand firme, and couching their pikes point to the breaſt of the horſe, for that is the place of moſt aduantage. A ſquadron of pikes thus couched and handled by reſolute and honeſt men, I cannot ſee how any troupe of horſe dare venture vpon them: and if they do, yet not able to breake farre in, if men ſtand reſolute: ſo of force muſt they retire with loſſe and diſaduantage. But if they be encountred with equall numbers, proportions, and force of pikemen, then (if they will) they aduance their pikes vntill they come to the puſh, then with charging ouer hand to thruſt and puſh couragious and valiantly; at which time valour and skill is ſhewed, as ſecond meanes of victorie, but *God the firſt cauſe and giuer of all.*

The ſquadrons of muskets when to diſcharge.

The couching of the pikes.

A ſquare of pikes handled by reſolute men, not eaſie to be broken by horſe.

Againſt foote to charge ouerhand.

Valour and skill is ſecond meanes of victorie, but God the chiefe & firſt.

Gent. In few wordes you haue finiſhed a battell: But your leaders and Commanders, how are they this while employed?

Capt. Euery one according to his office & place, to encourage & animate the ſouldiers, to redreſſe with ſpeed any diſorders happening in their own troupes, to eſpie the diſorders or negligence of the enemy, taking aduantage vpõ ſuch occaſion: with ſundry other points, which in their ſeuerall duties ſhall be declared.

The diuties of diligent officers in time of battell.

The ſecond Dialogue, wherein is declared the order of many ancient formes of imbattailing.

Gentleman.

YOu ſpake of more ſortes of battels, I pray therefore declare vnto vs their orders, how many, in what formes, and to what vſes.

Capt. Although I haue before ſomwhat touched the ſame, not minding to medle farther then with our fights now moſt accuſtomed, yet neuertheleſſe drawen on by your good and curious demaundes, I will, the beſt I can, particularly deſcribe them. Therefore, as I haue before declared of all formes of battels now in our age moſt in vſe, beſt approued, and beſt allowed of, is the iuſt ſquare

The iuſt ſquare of men beſt allowed, out of the which all other proportions may be reduced.

of

of men, as equally ſtrong on euery ſide, and moſt fit, and beſt aſſured for the open field; and out of which quadrate all other formes may eaſily be reduced. Next vnto that, and moſt aduantagious (indeede) to fight, is the quadrate of ground by good regard had, wherein many hands are brought at one time to fight. Of both the which formes I haue before largely diſcourſed, as well the manner how to frame them, as their due ſortement with weapons, and ſhot to the ſame; I will now ſpeake ſomewhat of the reſt, of the which there are many ſorts ſeruing in old time vnto many purpoſes (but now with vs quite out of vſe) as the *Diamant battell*, *the VVedge battell or Triangle*, *the Sheers battell*, *the Saw battell*, *the Moone battell*, *the S D G battels* and the *Croſſe battell*, with ſuch like, and chiefly the *battell compounded of ſundrie battallions*; the which laſt recited, of all others, I thinke to be the moſt ſtrong and aduantagious, were men expert, skilfull, and ready: but raw, as in our dayes they be, very difficult and dangerous to be handled.

The quadrat of ground.

Sundry ancient formes of battels now out of vſe.

The daunger of raw men.

The neareſt therefore vnto the ſquare of men, is the Diamant battell; vnto the framing whereof, out of the ſaid ſquare, there needeth no more, but whereas the leader ſtood before on the ſquare of the battell, let him appoint another to go to the next corner or angle thereof, and willing the pikes to turne their faces vpon him, and they ſhall ſtraight, out of the ſquare, march into a Diamant proportion: which forme when you are diſpoſed to alter, do no more but appoint the leader to the ſquare, where he firſt ſtood, commaunding the pikes to turne their faces vpon him, and they ſhall forthwith march into a ſquare battell againe. The facilitie is great both herein and in all others, and that without any confuſion, as by their ſeuerall figures following ſhall appeare; the which I haue framed of 25 letters, the better to giue you to vnderſtand.

The Diamant battell.

The framing thereof, out of the graund ſquare.

A ſquare of Men. fronte.

A	B	C	D	E
F	G	H	I	K
L	M	N	O	P
Q	R	S	T	V
W	X	Y	Z	&

Diamant Battell fronte

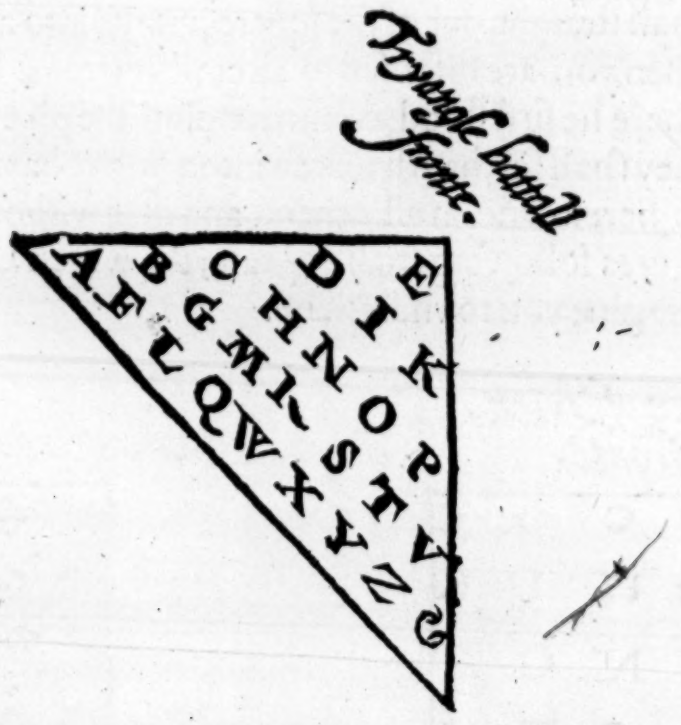


And againe out of the Diamant forme may be reduced two triangles, by cutting or diuiding the ſame in the middeſt at the two flat angles, as in this figure of a Diamant forme may appeare by the prickes running along: & of 2 triangles may be framed a Sheeres battell and of 3 or 4 triangles may in like ſort be framed the Saw battell, by ioyning the angles together as in their figures following ſhall appeare.

Here you ſee the ſquare reduced into a Diamant forme, with onely turning their faces vnto the right angle *E*, as aboue appeareth, & ſo marching on, do fall into a perfect Diamant forme, with two ſharpe angles, and two flat. But in their march they will ſtretch ouer-long, each man from his leadeſman, ſo will it be of

no force to fight, by reaſon of their raritie & thin ſtanding, as in the former figure may appeare by *F.B.* & by *L.G.C.* & by *G.M.H.D.* & by *VV.R.N.N.E*, the two ſharp angles; and ſo of the reſt. To reforme the which fault; Firſt commaund your men to ſtand in the forme they are; then cauſing the two ſides of the firſt angle *E* to ſtand yet firme, and commaund euery one of the reſt (except the ſaid two ſides) to march on, one after another, vntill he come to finde himſelfe in a due diſtance, each after his leadſman: thus *F.* ſhall march vp towardes *B.* vntill he finde *A.* to be his left-ſide fellow, thē there to reſt: thē againe *G.* ſhall proceede towards *C.* vntill *B.* be his ſide fellow, *L* following him vntill *F.* be his ſide fellow, then ſhall *H.* paſſe forward toward *D*, vntill he finde *C.* to be his ſide fellow, *M.* following, *H.* & *Q.* following *M.* Then ſhall *I.* ſtep vp betweene *D.* & *K*, and *N.* following *I*, & *R.* following *N*, and *VV.* following *R.* Likewiſe *O*, ſhall go nearer vnto *K.* vntill he finde *P.* his right ſide fellow, and *N.* on his left ſide: *S.* ſhall follow *O*, and *X.* ſhall follow *S*: then ſhall *T.* proceede towardes *P*, and *Y.* follow *T.* Laſtly *Z.* ſhall ſtep vp betweene *&.* and *Y*: So is there framed a perfect triangle or wedge battell; as in this figure following ſhall appeare.

A more ſtrouger framin of the Diamant battell.



Here haue you ſeene, how out of a ſquare of men hath bin firſt reduced a Diamant battell ſimple; and out of the Diamant a triangle or wedge battell in perfect order to fight, which is with 1. man in the firſt ranke, 3 in the ſecond, and 5 in the third ranke, & ſo conſequently augmenting 2 in euery ranke, with the Enſigne in the middeſt. Now, by this order out of 2 iuſt ſquares of men, are reduced 2 triangles; and of two perfect Triangles, is formed a Perfect Diamant battel, by ioyning the two rereward parts together. But firſt out of the one Triangle muſt be drawen the laſt ranke of all, the which may be placed at the latter point of the Diamant battell, or elſe as the Sergeāt Maior ſhall thinke good. The figures of both which ſquadrons reduced into Diamant formes, and from Diamants into 2 Triangles, laſtly adioyning the 2 Triangle backe parts together, is formed a perfect Diamant battell fit to fight; as by their ſeuerall figures here following may be ſeene.

Out of 2 iuſt ſquares of men is framed 2 triangles.

Of 2 triangles is framed a Diamant.

In

The first squadron front.

A	B	C	D	E
F	G	H	I	K
L	M	N	O	P
Q	R	S	T	V
W	X	Y	Z	&

The second squadron front.

A	B	C	D	E
F	G	H	I	K
L	M	N	O	P
Q	R	S	T	V
W	X	Y	Z	&

The square.

These two squadrons shal be reduced into 2 triangles, in manner as aforesaid, which will be in forme following.

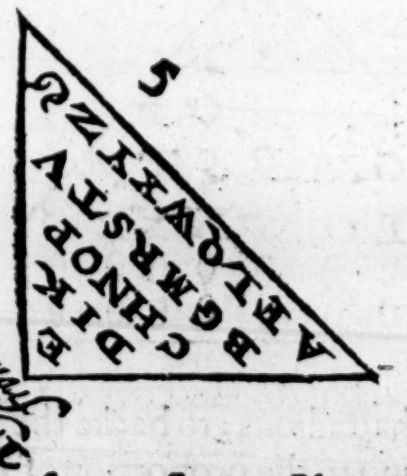
3 *Fronte*

A	B	C	D	E
F	G	H	I	K
L	M	N	O	P
Q	R	S	T	V
W	X	Y	Z	&

4 *Tryangle Fronte*



The triangle.



6

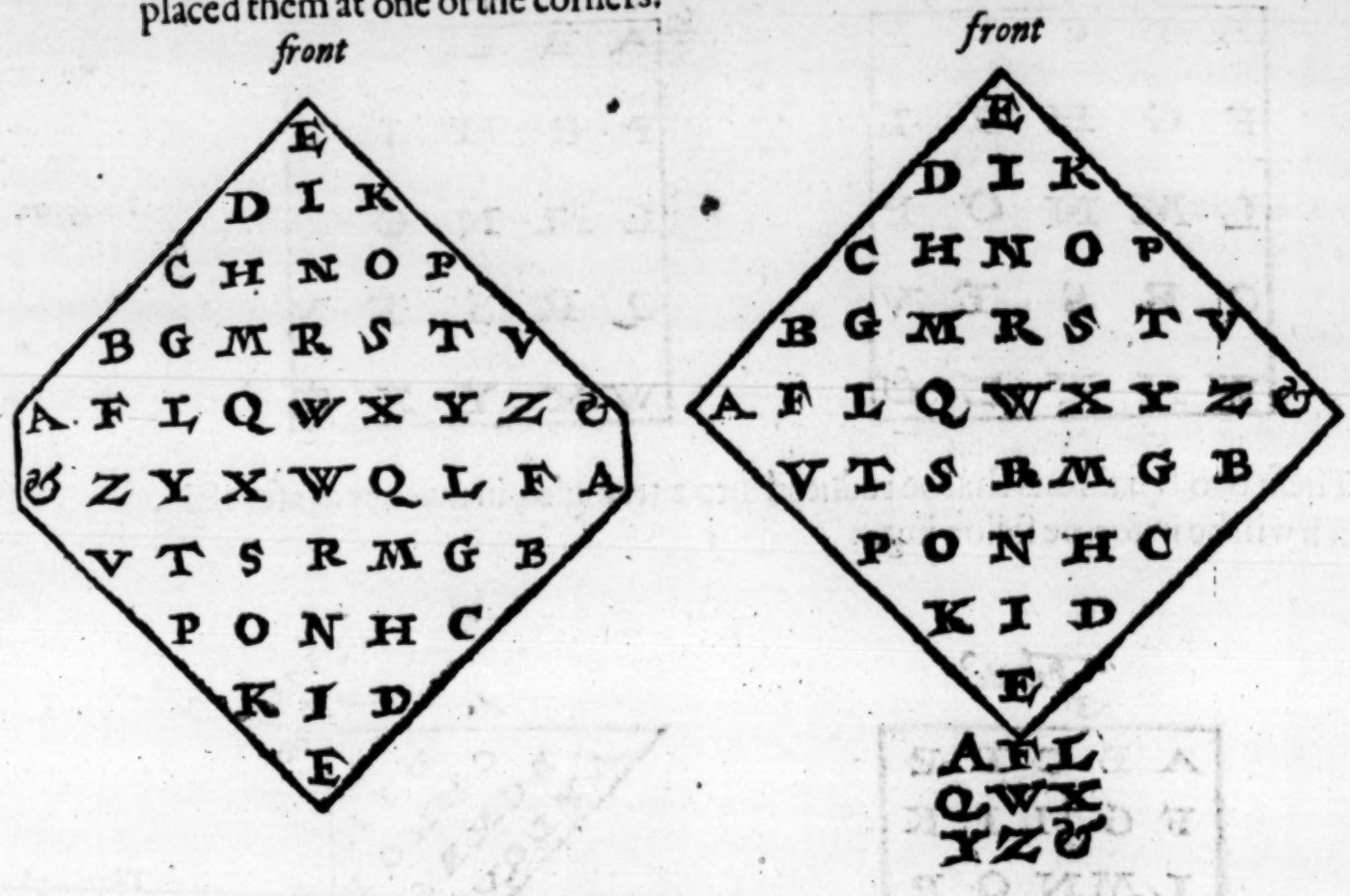
A	B	C	D	E
F	G	H	I	K
L	M	N	O	P
Q	R	S	T	V
W	X	Y	Z	&

fronte

In these 6 former figures, I haue declared the order how, out of 2 squadrons of men, to bring them into 2 Diamant formes simple, and out of 2 Diamant formes single, to reduce them into 2 perfect Triangles, by causing all their middle ranks to march vp, vntill they find their leadsman before them in their due distance: the which 2 Triangles, being thus perfected (as in the 4 and 5 figure may appeare) and ioyning the two backe parts together, do make this perfect Diamant forme to fight, as here by the 2 figures following shall appeare. But of the second fi-

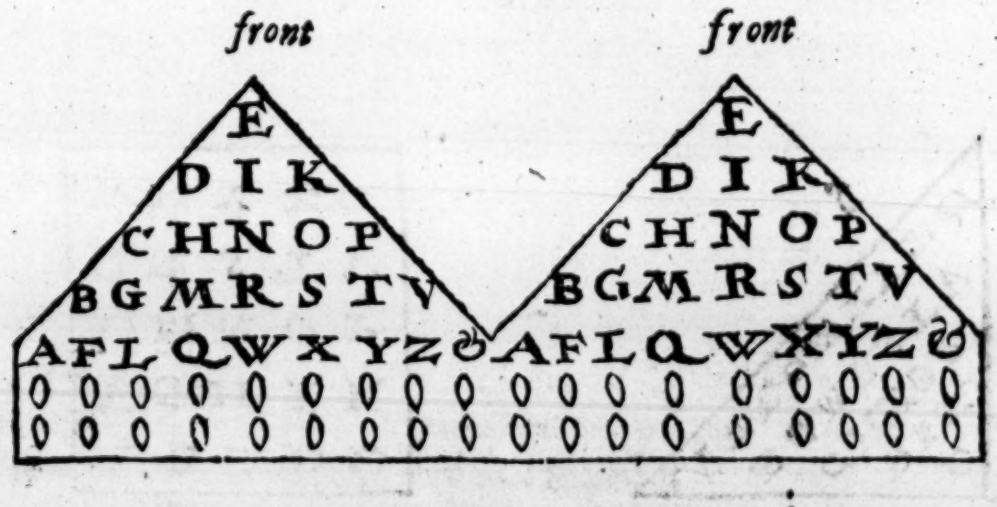
gure I haue drawen the latter ranke of one of the Triangles, being nine men, and placed them at one of the corners.

The Diamant battell.



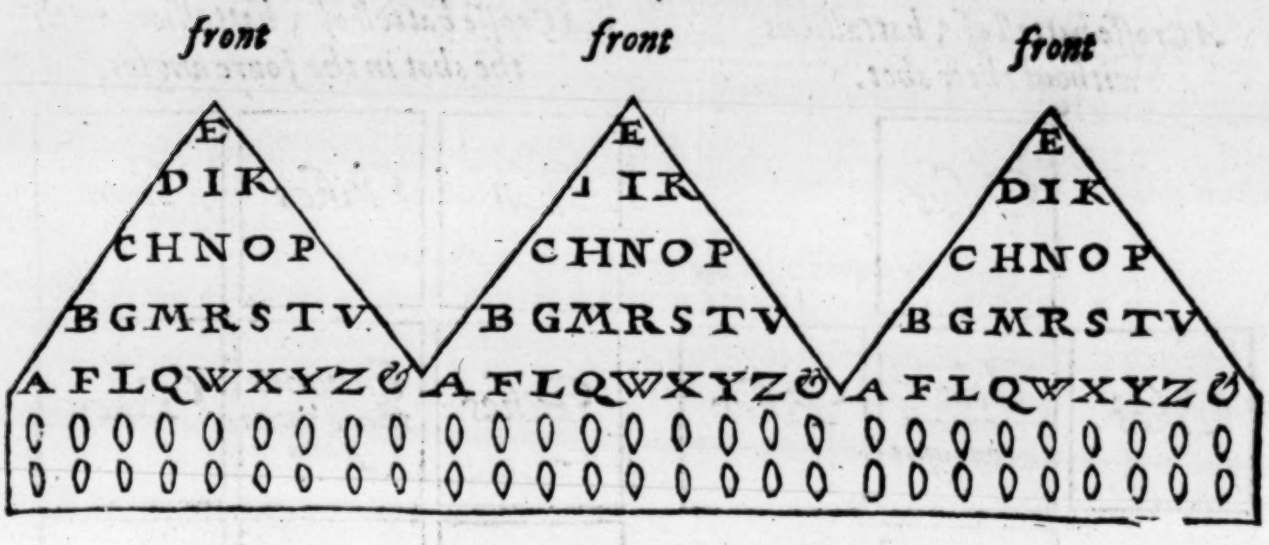
Now, touching the Sheeres battell, the ſame is to be made of 4 battallions of equal proportiõ, working, as before you did with the Diamant & Triangle battels: the which 4 battallions being reduced (as before is ſayd) into 2 triangles, and ioyning their two corners together, is framed the Sheeres battell, as here you ſee.

The Sheeres battell.



Loe here the Sheere battell framed of 4 battallions; to backe the which you muſt draw vp 2, 3 or 4 rankes of pikes according to the proportion of the battell, and place them on the backe part thereof, as you ſee aboue deſigned by this letter *O*, where I haue backed the ſame with 2 rankes, at 18 men in a ranke. And alſo the ſame order is to be obſerued in the Saw battell, as after appeareth. Next is the Saw battell, which containeth 3 ſharpe angles framed of *6* battallions, in ſuch order as the Wedge, & Sheeres battels before wrought, as here in the figure following is deſigned.

Thus



The Saw battell.

Thus you ſee this Saw battell framed and reduced out of 6 ſquare battallions. But there is another order yet to frame theſe Diamant, Triangle, Saw, and Sheere battels, which is thus: Place in the firſt angle or ranke, one man; in the ſecond ranke 3 men, in the third ranke, 5 men, and in the fourth ranke 7 men; and ſo conſequently adding vnto euery ranke 2 men, vntill you haue finiſhed your battell into ſuch proportion as you ſhall thinke good.

An other order yet to frame their battels.

Now, there haue I ſpent more time in thoſe trifling formes and vnuſed proportions then I needed, but only to giue you content, and to the end to ſhew, that he, which is a Sergeant Maior, ought not to be ignorant in any manner of proportions, as well ancient as moderne; whereby he may be both able, skilfull and ready to frame, alter, and change his proportions, as occaſion ſhall be offered; and that with facilitie and ſpeed.

A Sergeant maior ought not to be ignorant of any formes of embattailing as well ancient as moderne.

Gent. To what intent and purpoſe were theſe proportions of Diamant, Triangle, Sheeres, and Saw battels firſt deuiſed?

To what purpoſe theſe termes were firſt deuiſed.

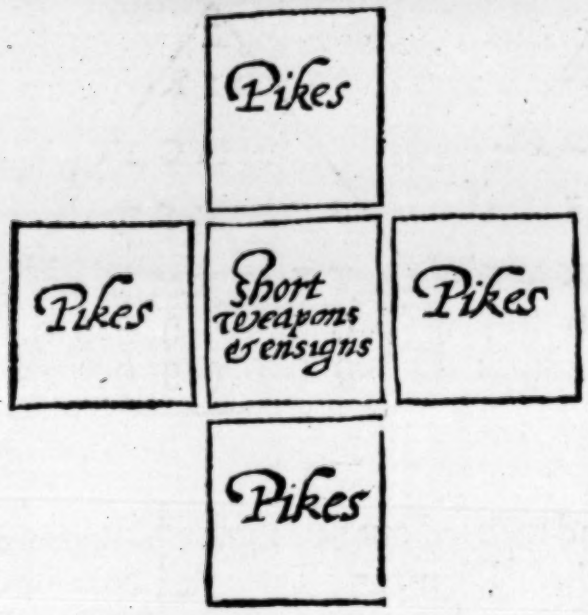
Capt. The Triangle and Diamant battels were inuented by antiquitie to encounter the ſquare, the Sheeres battell to encounter the Triangle or Wedge battell, and the Saw battell to encounter the Sheeres battell. All the which are in ſmall vſe in our dayes.

Gent. Will you ſpeake nothing of the Croſſe battell, ſo much commended by ſome men; nor of the battell compounded of ſundry battallions?

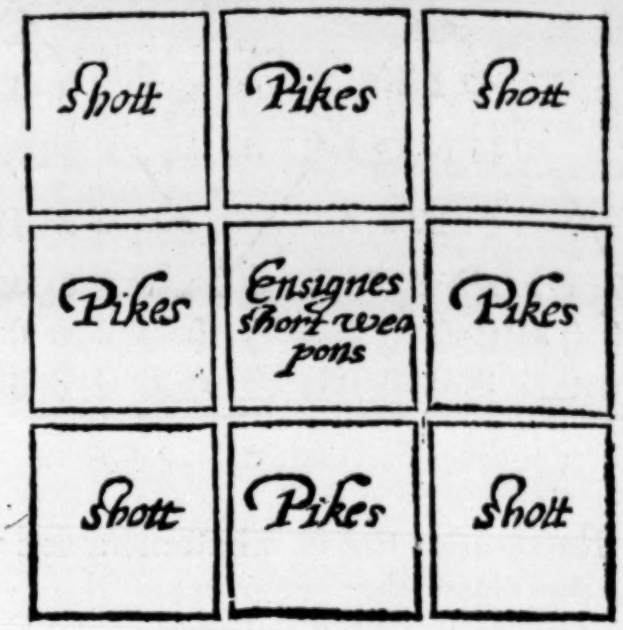
The croſſe battell, and order thereof.

Capt. The Croſſe battels haue bene moſt vſed by the *Swedens*, and high *Germaines*. The forme whereof, be it in ſundry battallions ſeuerally appointed, or in one whole and entire battell all together ioyned, is no doubt, of maruellous great ſtrength and verie excellent conueyance: by reaſon of the ſundry places of ſafegard and defence miniſtred to the ſhot and hurt perſons therein. It is commonly framed of 5 battallions or ſquadrons, 4 in croſſe wiſe, and one in the middle: the which middle battallion may conteine your Enſignes and ſhort weapons: but if it be framed of 4 battallions, with the center vnfilled, then may the center containe the impedimentes and baggage of the armie.

A Croſſe battell of 5 battallions without their shot.



A Croſſe battell of 5 battallions with the shot in the foure angles.



A declaration of theſe Croſſe battels.

I haue here figured a Croſſe battell compounded of 5 battallions, the middle battallion conteineth the Enſignes and ſhort weapons without their ſhot. And in the ſecond figure I haue ſet downe the ſayd Croſſe battell, with their ſhot beſtowed, in the 4 voyde angles or corners, in 4 other battallions or ſquadrons, as may appeare. Now for as much as I intend to frame certaine Tables to the forming of euery ſort & maner of all theſe foreſayd battels & battallions of all numbers of mē, from the ſmalleſt number vnto 10000 pikes, I will leaue at this inſtant to ſpeake any more therof: hoping this already ſpoken to be ſufficient for any willing minded Gentlemen, which haue not yet ſeene wars, & deſirous to vnderſtand ſome points of martiall matters: for vnto thoſe do I write, & not vnto the expert ſouldier, whoſe skill and experience, annexed with learning I honour and reuerence. For ſurely *ſpeculation without Practiſe, is but halfe of the Arte, but both ioyntly together maketh the ſame perfect.*

Speculatiō without practiſe, but halfe the Arte.

Gent. Although we haue bin tedious vnto you, yet I pray let vs intreat you, to ſhew vs the order of the battell compounded of many battallions.

To deuide a ſmall power into many parts, dangerous.

Capt. To deuide a ſmall power into many parts, were but dangerous: but hauing a ſufficient and competent armie, the maner is now a dayes to deuide them but into 3, diſtinguiſhed into Vantgard, Battell & Rereward; yet, if men were perfect and ready, a ſufficient armie might well be reparted into ſundry battallions, contained in two or three frōts, neare after the ancient *Romanes*, the one to ſupply and ſecond the other: a matter of great importance, eſpecially if it ſhold come to campall fight, by reaſon of the diuerſe breathings and ſuccouring one another; a thing ſeldome ſeene in our age.

Gent. What meane you by a ſufficient and competent armie.

Capt. Not a handfull of men of three or foure thouſand, as we vſe now a dayes: But I vnderſtand that a ſufficient and able armie ſhould conteine 12000 pikes and ſhort weapons or there abouts, and as many ſhot; making 24000 in both and alſo 6000 horſe.

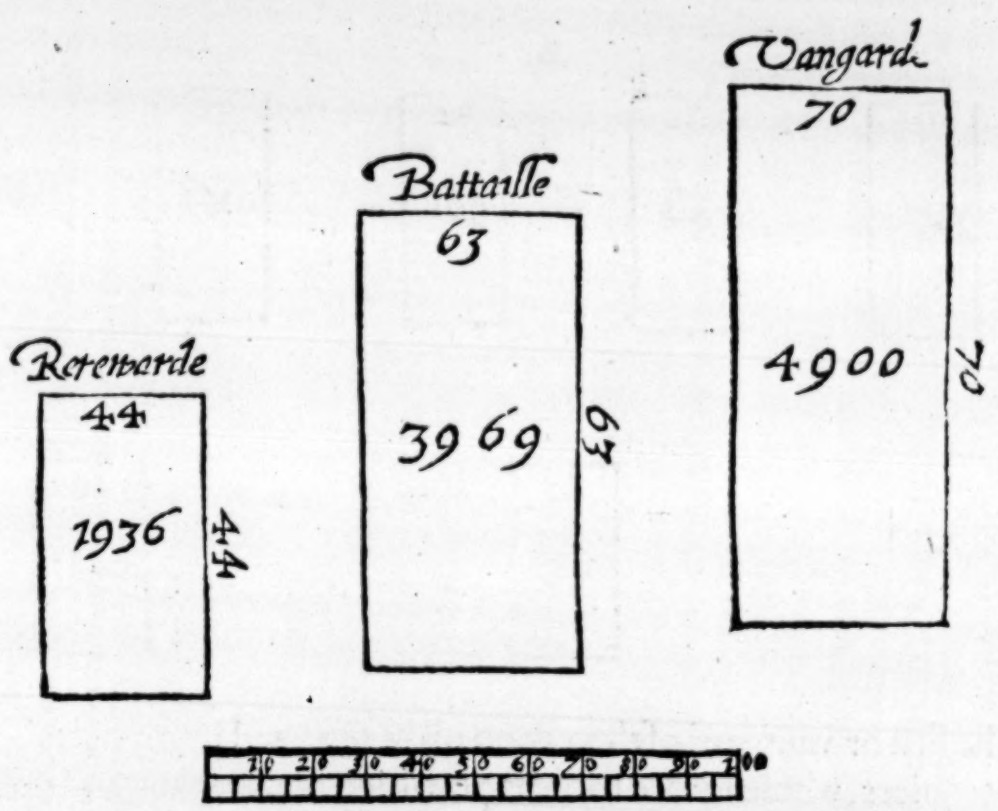
What to be a ſufficient armie.

Gent. How would you repart theſe 12000 pikes and ſhort weapon into 3 battallions, diſtinguiſhed into vantgard, battell, and reareward: or into more battallions.

tallions. I pray ſhew vnto vs the order thereof in figures.

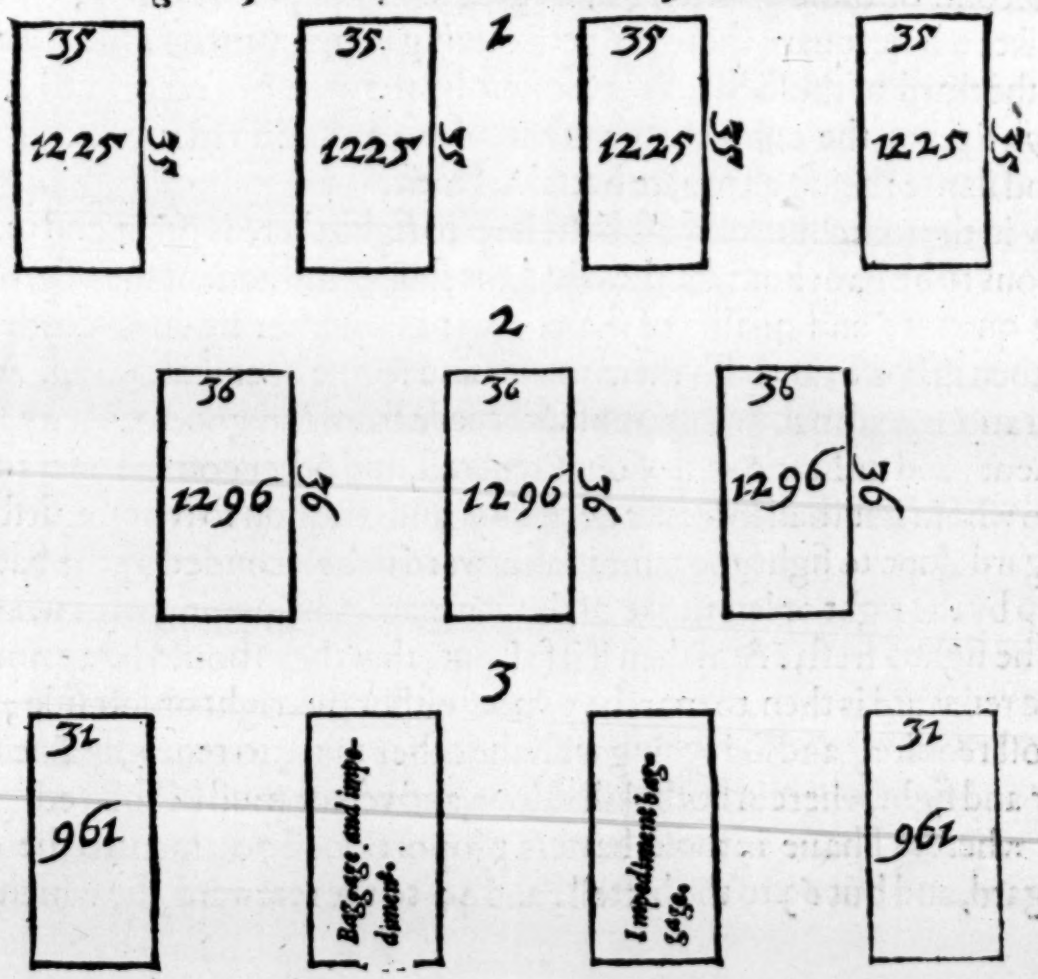
Capt. Of theſe 12000 pikes and ſhort weapon, behold here in figure 11000 of them (for there is 1000 reſerued for other purpoſes) deuided, firſt into 3 battels, or ſquares of men, and then againe into 9 battallions, and laſtly into 12, as by their ſeuerall figures ſhall appeare.

The figure of 11000 *pikes, reparted into* 3 *battels.*

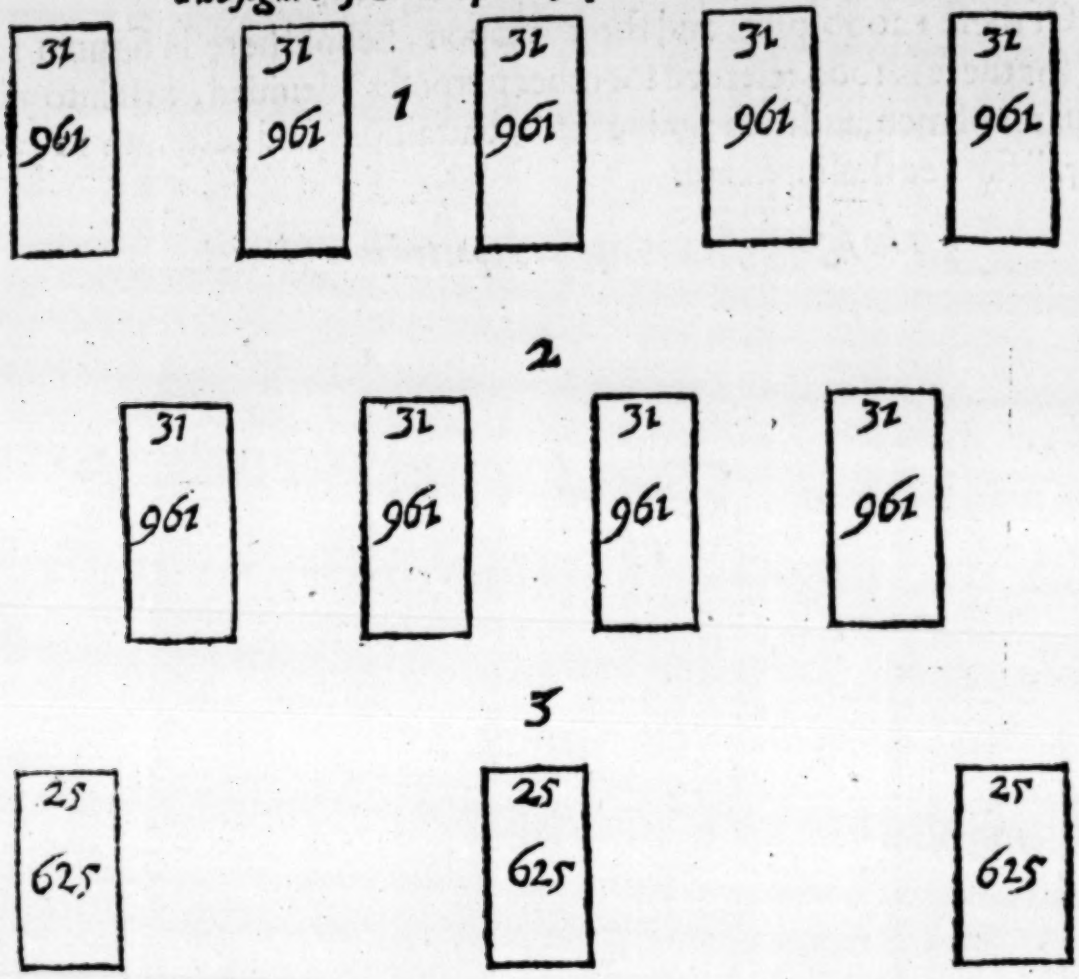


Into three battels.

The figure of 11000 *piles deuided into* 9 *battallions.*



The figure of 11000 *pikes, reparted into* 12 *battallions.*



Into twelue battallions.

Vantgard. *Gent.* The firſt or vantgard of the 11000 pikes reparted into 3 battels, containeth 4900 piquiers, whoſe ſquare roote is 70, which is 70 rankes, and 70 men *per* ranke, or 70 in front, and 70 in flanke, or 70 ranks and 70 files: all which is all one.

Battell. In the ſecond of thoſe 3 battels, diſtinguiſhed by name of battell, is contained 3969 pikes whoſe ſquare roote is 63 containing ſo many men in front and flanke.

Reareward. Laſtly, the third of thoſe battels, tearmed by the name of reareward, doth containe 1936 pikes, the cubike roote whereof is 44, and ſo many it containeth in front and flanke: being all ſquare battels of men.

Many conſiderations in bringing men to fight. Now in the marching of theſe battels vp to fight, there is great and many conſiderations to be had; both for the wind, the ſunne, and aduantage of ground, and alſo the quantity and quality of the enemy: as whether he do exceede more in foote, then in horſe; and alſo their maner and forme of embattailing. All which conſiderations, and many more, muſt proceede from the good capacity, ſound intendement, and militarie skill of our Generall, and other commanders of our army; vnto whom if it ſhall ſo ſeeme neceſſary, and occaſion ſo require, firſt to leade the vãtgard alone to fight, the ſame is afterward to be ſeconded by the battel, marching vp by the right or left flanke of the vantgard, and ioyning with whom, may renew the fight a freſh. And then if it fall out, that they ſhould be againe diſtreſſed, the rereward is then to march vp vpon either the right or left ſide, as cauſe ſhall moſt require, and ſo ioyning with the other two, to renew againe their encounter and fight, wherein both skill valour, and vertue muſt be ſhewed.

A conſideration. And whereas I haue in thoſe battels proportioned 70 men to the depth of the vangard, and but 63 to the battell, and 44 to the rereward, the which drawne

vp

vp together in that proportion ſhould badly correſpond by reaſon of their different depthes, or flankes; it muſt be therefore conſidered, that the firſt ſhocke and brunt is commonly the hardeſt, and no doubt but many men of the firſt ranks muſt fall at their ſeuerall encounters: and comming ſo to paſſe (as of neceſſity it would) then theſe different proportions ſhould ſoone come to be different; as any iudicious men may conceiue.

A declaration of the 9 battallions.

Secondly, the ſaid number of the 3 battels are deuided into 9 battallions of the ſame kind and nature that their grand battels were of, whereof there is made 3 fronts, in the firſt front is contained 4 battallions or ſquadrons, with their ſeuerall ſpaces betwixt. The ſecond front or ſupply is framed of 3 battallions, with their ſeuerall ſpaces betwixt. And the third front or laſt hope and ſuccour containeth 2 battallions. The which 2 battallions I haue placed vpon the two out angles of the 3 middle battallions; and in the voide ſpaces betwixt, is placed the impediments and baggage of the army. The ſeuerall breadth, depthes, and numbers of euery of theſe battallions, are ſet downe in their ſeuerall figures.

Gent. To what purpoſe ſerueth the voyde ſpaces betwixt euery battell?

The voide ſpaces to what purpoſe.

Capt. The voide ſpaces may ſerue for the troupes of ſhot to ſallie out of skirmiſh with the enemy, and to retire againe, and alſo for the 3 battallions of the ſecond front, to march vp and paſſe betwixt them, for the battallions of the firſt front hauing encountred the enemy, and feeling themſelues diſtreſſed, are warily and orderly to retire with their faces and weapon point bent vpon the enemie. At which retiring the Battallions of the ſecond front, are to aduance foreward, and to paſſe in betwixt the voide ſpaces of the firſt 4 battallions, and ſo all ioyning valiantly together with the firſt, to make a freſh head, and to begin a ſecond fight. And being then againe diſtreſſed, they are all orderly to retire, as is ſayd. Then laſtly the two battallions of the 3 front, are to aduance the one vp by the one ſide of the other battallions, and the other vp by the other ſide of them; or as occaſion ſhall moſt require: and then finally all ioyntly together to giue a third and finall fight. By which order it ſhould ſeeme, fortune to abandon them thrice before that they ſhould be quighte vanquiſhed.

Sundry charges and freſh heads.

A declaration of the 12 battallions.

And laſt of all, the former 3 battels are reparted into 12 battallions of the ſame kind, diſtinguiſhed into 3 fronts. The firſt front whereof containeth 5 battallions, of 961 men in each battallion, whoſe ſquare roote is 31 with their ſeuerall ſpaces betwixt. The ſecond front is framed of 4 battallions, of 961 men each, whoſe ſquare roote is ſtill 31, with ſeuerall ſpaces betwixt euery battallion. And the third front is formed of 3 battailions, containing in each 625 men, whoſe ſquare roote is 25 for front and flanke. The which three fronts of battallions, are orderly to aduance, to charge, to retire, and to recharge, as in the former diſcourſe is deſcribed.

Gent. The ſhot belonging vnto the ſaid numbers, where are they to be placed and emploied?

Capt. The ſhot appertaining vnto euery of theſe battels and battallions ought to be deuided (in mine opinion) into ſundry ſmall troupes; trouping about the ſaid battels and battallions to maintaine skirmiſh, and ſome to be placed vpon bankes, ditches, and ground of aduantage (the ſituation yeelding ſuch) according to the direction of the Sergeant Maior generall: and the cauallery a reaſonable

The ſhot parted into ſundry troupes.

The cauallery.

distance without the out angles of the battels or battalions, in troupes and squadrons, seruing as wings to the same, and vpon groundes of aduantage and places fit for their seruice, with good regard had, that they passe not on the front of your battallions, for danger of disordering your owne squadrons vpon their retrait, as in folio 72 is described.

Gent. What quantitie of ground shall these battels and battallions require?

The quantity of ground for each souldiers station.

Capt. I haue sayd before, that vnto euery picquier at the time of ioyning the charge, is to be allowed for his station in front or breadth, that is, from shoulder to shoulder, at the least 3 foote; and for depth, that is, for before and after 7 foote at the least, for his owne station, and for the vse of this weapon. And the voide spaces betwixt the battallions are to containe in breadth as much as do the battallions of the second front, within the which they are to aduance and passe: so is it easily to be calculated, what quantity of ground such order of battels and battallions will require. Moreouer it must be considered, that there must be a conuenient space of ground remaine betweene the traine of the first order of battallions, and the front of the second order, and in like sort from the traine of the second order, vnto the front of the third order: as some 20, or 25 pases betwixt each, or such as the ground will permit, or occasion require.

Gent. What place is the generall and other chiefe commanders to keepe in these orders of fightes: or are they to be on horsebacke or on foote?

What commander and officers to be mounted.

Capt. The Lord generall is to be well mounted, and the Campe-Maister Generall, and Sergeant Maior Generall, are to bee mounted on good geldings, *Andadoras* and not *Corradoras*. Whereby they may speedily passe from place to place, especially the Campe-maister and Sergeant Maior generall, to execute the Lord Generals commands, to keepe the squadrons in order, and to redresse the disordered: as in such occurrants shall be requisite.

The Generall his place.

The Generall his place, is commonly in the space vpon the front of the second order of the battallions: from whence he may most conueniently send his directions and orders: to do the which, besides the Campe-maister and Sergeant Maior Generall, & his Trumpet, and chiefe Drummer, he is to haue attendant vpon him certaine expert gentlemen both on horsebacke and on foote.

The Colonels.

The Colonels of euery foote regiment, are with their companies to serue on foote, being arraunged to fight: their due place is the right angle of the first ranke of their squadrõs, & their Lieutenants in the left angle of the same ranks, the Captaines and other inferiour officers, in ranke also, as their place requireth; as more at large in their seuerall duties is declared.

But in case that a Colonell were in any peece of seruice with his regiment alone, then is hee to employ the place and office of a Generall, for the present seruice. The Ensignes are to be placed in the centre, or neare the center, towards the formost rankes of euery battell or battallion, and to stand in ranke also. Finally of these 12000 pikes and short weapon, there is reserued out, about 1000 to serue to other purposes: as to gard the artillery, munition, and impediments, and such other peeces of seruice.

Another order to deuide an army into sundry small squadrons.

There is yet another order of deuiding an army into sundry small battallions, or squadrons of one kind, each squadron containing 100 pikes, 10 in front, and 10 deepe,

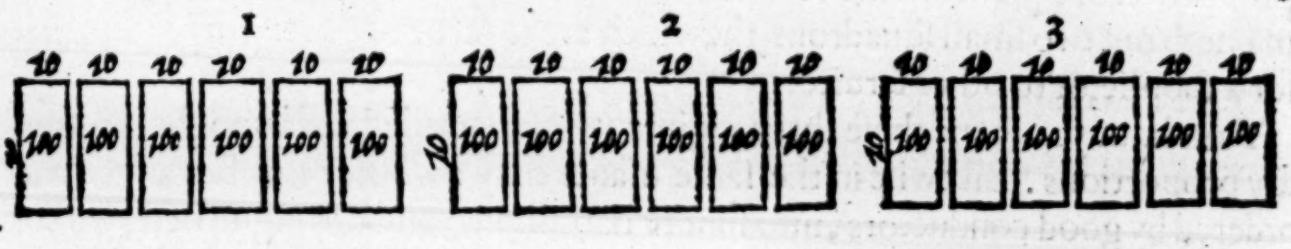
deepe, embattailed by ſingle files, of 10 men in euery file, the order and manner whereof is in folio 38,42,43, particularly deſcribed.

Gent I pray, how ſhould a regiment or many, or an army be martialled or embattailled after this maner? *The manner.*

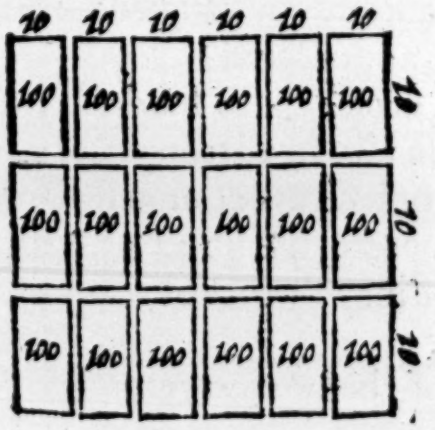
Capt. If you wold haue all your army deuided into battallions or ſquadrons of that kind, then are the Colonels of euery particular regiment, to cauſe the companies of their regiment to embattel themſelues, vpon a ſound of the drumme, in ſuch ſmal battallions or ſquadrons of 100 pikes, in euery ſquadron 10 in front, and 10 deepe, as in folio 38,39, and 4 may appeare.

And ſuppoſe that the 24000 footmen were reparted into 20 regiments, after 1200 into euery regiment: of the which 1200 men there is 600 picquiers, thoſe 600 picquiers are to be embattailed into 6 ſmall ſquadrons of 100 in each ſquadron, at 10 in front and 10 deepe. Being thus embattailed into ſundry ſmall ſquadrons of one kind, they may with great facility be brought into any proportion you will, as by theſe figures following may appeare. Where you ſee embattailed the picquiers of three regiments ſeueral into their ſmal ſquadrons, of 100 in each ſquadron, at 10 in front, and 10 deepe, all in one front.

The figure of 3 regiments embattailed into ſundry ſmall ſquadrons, all in one front.



The 2. figure of 3 regiments embattailed into a battell of double front.



This 3 figure of 3 regiments embattailed into a inſt ſquare of men.



Two ſquadrons remaining.

In the firſt figure you may behold 3 regiments embattailed into 18 ſmall ſquadrons; in the ſecond figure behold the ſame reduced into a battell of double front, or into a due ſquare of ground, which is twice ſo many men in front as in flanke: and in the 3 figure, you may ſee the ſaid 3 regiments brought into a iuſt ſquare of men; that is, as many men in breadth as in depth: the order whereof is thus.

The firſt regiment being embattailed into 6 ſmall ſquadrons, and placed in one equall front, the ſecond regiment (being embattailed in the like maner) is to march vp vnto the traine of the firſt 6 ſquadrons, there ioyning ſquadron with ſquadron, and anſwering file with file. After them againe is the other laſt 6 ſquadrons to march vp vnto the traine of thoſe 6 middle ſquadrons, and placed euen ſquadron with ſquadron and file with file: ſo that of theſe three regiments there is made one body of a battell of broade front, or due ſquare of ground, which is twice ſo many men in breadth as in depth, as by the ſecond figure may appeare.

The order. Finally, if you ſhold be occaſioned to reduce the ſaid three regiments into one grand battell of equall proportion, or due ſquare of men: then place 4 of theſe ſmall ſquadrons in one front, on whoſe traine 4 other ſquadrons are to march vp; and then againe 4 others, and laſtly the laſt foure ſquadrons; ſo that ſquadron with ſquadron, and file with file, may equally anſwere one another, as in the third figure may appeare. Where, of 16 of theſe ſmall ſquadrons is framed a battell in proportion of equality: which is ſo many men in depth as in front: and there remaineth out two ſmall ſquadrons, the which are to ſerue to other purpoſes, either for a ſupplie, or to other ſeruices.

An army may be framed of ſundry ſmall ſquadrons. Thus haue you ſeene theſe three regiments embattailed and brought into ſundry proportions. Likewiſe in the ſame maner may a whole army be ranged and ordered by good conductors, into ſundry battallions, and diſtinguiſhed, either into one, two, or three fronts: as the iuſt occaſions, and the iudicious intendement of the good commander ſhall concurre and find conuenient.

Gent. By deſcribing vnto vs theſe ſeuerall orders of reparting an army into ſundry battallions & ſquadrons, ye haue contented vs wonderfull well: & it ſeemeth (in mine opinion) much aduantagious, being diſcretly and orderly handled. But how ſhould the ſhot, due vnto thoſe regiments, be placed and ordered?

Cap. The ſhot belonging vnto theſe regiments, deuided into ſundry battels, battallions and ſquadrons, ſhould be reparted into ſundry ſmall troupes, of 50 in each troupe, at 5 in front, and 10 in depth, or more, or leſſe, as occaſion ſhall procure; the ordering and placing of which ſhot doth appeare, in folio 42 43, & 73, & is in many other places deſcribed; ſo that one troupe may alwayes be ready to ſecond another, and to giue breathing one to another.

Gent. But what haue you next to ſpeake more of, before you returne to the office of the Sergeant Maior: by reaſon of whoſe office you haue made theſe ſundry demonſtrations of diuerſe and many ſorts of battels, and battallions, as a matter moſt pertinent vnto the ſaid Sergeant Maior his office.

Of tables to be framed. *Cap.* I ſhould now ſet downe the tables of all theſe ſundry proportions: as firſt of battels in proportion of equality; which is the iuſt ſquare of men; their order of ranking; their deuiding into *Maniples*, and ſo marching vp ſhoulder to ſhoulder, to bring them into their former order of battell, with the marching vp of their

their remainers: their due numbers of girdling ſhot, and the deuiding of the ſaid battels into ſundry battallions of the ſame kind: then againe, the tables of battels in proportion of inequalitie, which is more in breadth then depth: with their deuiſions into battallions of that ſort, and the table of euen battallions for croſſe battels, and of other proportions, with the quantity of ground that euery of them would require; but time permitteth me not: reſeruing the ſame vnto the laſt booke of theſe our military diſcourſes. *Euen.*

But I muſt now ſpeake ſomething by the way, of marching our battell through ſtraightes, and being paſſed, how to fall againe into the former proportions.

When you come to any ſtraight, it muſt be conſidered of what wideneſſe the paſſages are, and how many men may go in front eaſily thorow the ſame; and then may you accordingly, at your diſcretion, chuſe whether you will draw your battell out into the former *Maniples*, that the ſame marched in before their comming into battell (as in the ſeuerall tables thereof ſhall be ſhewed) or into more *Maniples* or parts, if thereunto you ſhall be compelled by the narrowneſſe of the place: which likewiſe being ſo wide, that fewer *Maniples* then you marched vp before, will ſerue for their diuiſion, you may accordingly alſo draw them out into 3, 5, 7, or 9, *Maniples*, as the nature of the ſtraight, and your iudgement concurring together ſhall thinke meete. Alwayes prouided, that the enſignes be contained in the middle *Maniple*: and hauing paſſed the ſtraightes, you may againe draw them vp ſhoulder to ſhoulder, as in the order of marching in *Maniples*, is before in folio 62, 63, 66, and 68 declared; whereby eaſily and without confuſion they ſhall foorthwith fall in their former proportion. But as concerning your ſhot, you ſhall not neede (except the ſtraight be very narrow) to draw them out into any ſuch parts, without it be thoſe in the girdling, which as they ſtand in proportion in the battell, muſt be drawne out into *Maniples* with the pikes, for if mine opinion might be receiued touching the other ſhot, I would alwayes aduiſe, that the reſidue ſhould euer more remaine in many ſmall troupes, not aboue 40, or 50 ſhot, at the moſt in a troupe, as before I haue ſhewed, for that by experience I know the ſame to be of greateſt force, and readineſſe for ſeruice: be it therefore in plaine or ſtraight, or how ſoeuer, the more troupes your ſhot be ſeuered into, the better ſhall the enemy ſtill be applied; beſides the ſeconding the one of the other with ſuch quicke diſpatch, ſhall cauſe that after the firſt troupes haue once diſcharged, they retiring themſelues behind all the reſt, ſhall be ſure againſt they come vp againe, to haue leaſure enough to charge ſufficiently and ſurely, that few ſhot ſhall be ſpent in vaine, as they do when great numbers be cluſtred together.

To march an army thorough ſtraightes.

Drawne into Maniples.

The Enſigne to be contained in the middle Maniple.

The ſhot, in troupes moſt ſeruiceable.

The one to ſecond another.

Now, if it ſhould fortune (as moſt commonly it chaunceth) that the enemy ſhould fight with you in the ſtraight, then muſt you not draw your battell into thoſe *Maniples* or parts, but conſider whether the ſtraight be ſuch, as will ſuffice you to go thorough, holding the ſame proportion that you haue. If not, then conſider whether ſquaring the battell into 4 parts, you may with ſo many battallions paſſe to encounter with the enemy, if ſo you cannot, it ſeemeth vnto me the rediеſt and ſafeſt way, to deuide your battell into more battallions, as for example: firſt to proportion them out into 4 or 6, if thoſe bee not conuenient, then into 8, if you

If the enemy conſtraine to fight in the ſtraight then to quarter your Army.

To quarter the battell into ſundry battallions.

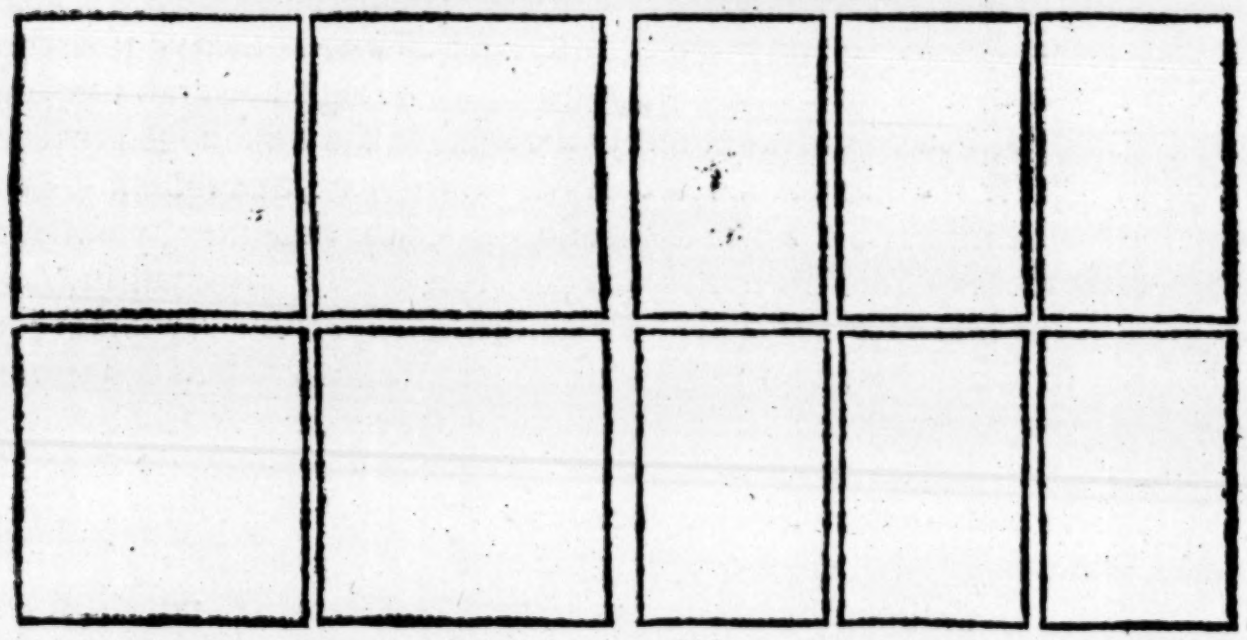
thinke that will not ſerue, then into 12 or 16 battallions, or as the paſſage will permit, which thing may more eaſily be brought to paſſe, if the body of your battell do conſiſt of pikes only, which, were the ſame of compound weapons, could in no wiſe bee ſo ſodainely done, without great confuſion; as a man of any iudgement may conceiue: and as by theſe figures following ſhall plainely appeare.

Not to enter vnaduiſedly into any ſtraights.

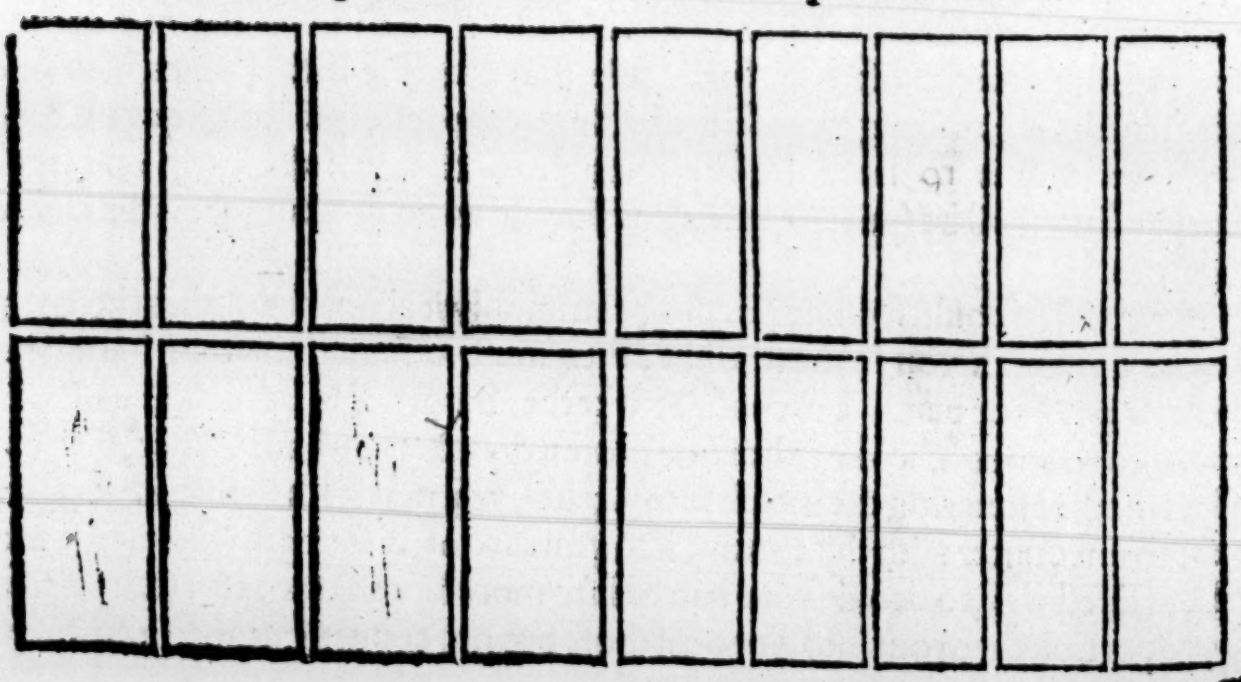
But before the arriuall vnto ſuch ſtraights and paſſages, the wiſe Commander is carefully to conſider, and to ſend ſundry ſcoutes abroade to diſcouer: and alſo ſhall cauſe (if poſſible he may) the ſummities, higher grounds, craggy rockes, thickets, woods, and other places of aduantage, to be firſt poſſeſſed by his owne people, ſending to that effect, ſhot, halfe pikes, and ſuch like.

The figures of quartering a battell.

The battell quartered into 4. *The battell quartered into 6.*

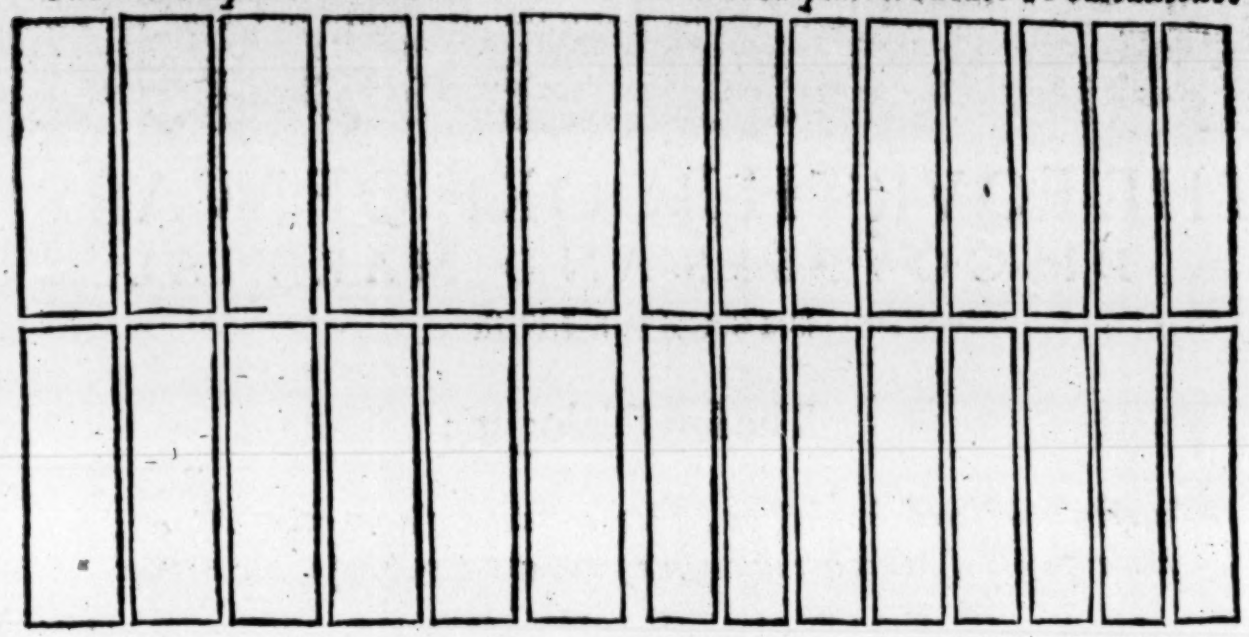


The battell quartered into 8. *The battell quartered into 10.*



The

The battell quartered into 12. *The battell quartered into* 16 *battallions.*



In deuiding and quartering of all which, as may appeare, the place of the Enſignes is ſtill croſſed, to redreſſe the which the Sergeant Maior or Colonell, may place them where he thinketh fitteſt: drawing out, where euery Enſigne ſhall ſtand, one pike; and replace the ſame pike in the firſt roome of the Enſigne which at the out drawing of the Enſigne remained voide. N°. 4.

The end of the third booke.

THE FOVRTH BOOKE OF WARRE DISCOVRSES AND MARTIAL DISCIPLINE.

The first Dialogue:

VVherein is declared the election, office, and dutie of a Sergeant Maior, with sundry points of Militarie discipline, &c. and marching of the Armie.

Gentleman.

TRuly (Captaine) this order for passing of Straights, doth cõtent me wonderfull well: and me thinkes, hauing ready men, and good officers, verie easie and readie to be perfourmed. But now (I pray) if there restes no more to be spoken herein, begin to shew vs the chooſing & office of a Sergeant Maior, which in day of battel, seemeth an office of great importãce.

Capt. I did at the begininng of my second booke, declare vnto you, that a Prince leuying an Armie royall, doth by his Councel (or Councell of warre, if there be any such in the realme) appoint first a most sufficient Generall, then a Camp-maister generall, a Captaine generall of the Cauallery, and a Captaine generall of the Artillerie. The Armie is deuided into sundrie *Tertios* or Regiments; ouer euery Regiment, a Camp-maister or Colonell. The Colonell deuides his Regiment into sundrie bandes or companies, and ouer euerie companie a Captaine: euery Captaine hath his Lieutenant, his Alferes or Ensignebearer, his Sergeants, his Caporals, and his Drummes and Phifes. Also euerie Regiment hath his Sergeant Maior; and ouer the whole Campe or Armie, a Sergeant Maior generall: of which Officer I meane now to treate.

The chiefe Commaunders of an Armie.
Deuided into Regiments.
The officers of the Regiment.
Deuided into Companies.
The officers of a Companie.
Sergeant Maior of a Regiment.
A Sergeant Maior generall.

The election and office of a Sergeant Maior.

The election of the Sergeant Maior, is made by the Generall, out of such as the Colonels do name vnto him. His office is, to be the generall minister or officer of a whole Regiment of sundrie companies, and Superintendent of all the Sergeants of the same. By whose hand and industrie, the Camp-maister or Colonell, doth giue and appoint the orders conuenient to the due gouernement of his Regiment or Armie: as in marching, in encamping, and imbattailing, and in such other matters concerning hereunto: whereby may be gathered the partes, the qualities, the valour, the great skill, experience and diligence, which ought to be in him, who is chosen to this degree of office; being of such importance, that in the

A Sergeant Maior is the generall Minister of a whole Regiment.
His office consists in marching, in imbattailing, & encamping.

the time of the *Greekes* and *Romaines*, this office was credited vnto none; but the Generals them ſelues did execute the ſame in their owne perſon.

The Sergeant Maiors office is of much higher degree, then any ordinarie Captaine: for euery Captaine doth receiue his directions from the Sergeant Maior; and the Sergeant Maior from the Colonell or Generall, or from the King or Emperour himſelfe, if he bee in field. For hee is barred no gate nor entrie, but is freely ſuffred to enter, euen into the Generals tent, or Kings chamber. Therefore there ought great regard to be had, in the election of this officer. Which being done in a perſon of inſufficiẽcie, doth many times cauſe great inconueniences to ariſe: and the perſon ſo choſen, for want of skill and naturall inſtinct, not knowing how to vphold his due authoritie, grauitie, and power, doth loſe oftentimes his due reſpect and reuerence of the Captaines, and other officers: whereby it had bene better for him to haue remained a Captaine of a ſingle companie, then to haue riſen to this degree of office, being not fit, for skill and nature thereunto.

The Sergeant Maior of higher degree then any ordinarie Captaine.

Great regard to be had in the election of this officer.

Skill and naturall inſtinct.

Gent. Then I perceiue that you would wiſh him that ſhould vſe the place of this office, beſides his experience and skill, to be alſo of a naturall inclination befitting the ſame.

Capt. So is my meaning: For beſides his long experience and practiſe in warres, he ought yet to haue a certaine naturall inſtinct befitting this office: for as much as the moſt of his actions are to be handled in the face and view of the enemie, and in place of greateſt perill; as ready at euery inſtant to redreſſe euery diſorder. He ought beſides his long experience, to be valiant, learned, quicke witted, and ready conceited, wiſe, diſcreet, and ready both to ſee, and foreſee, as well their owne, as the enemies orders or diſorders; preuenting, redreſſing, and taking aduantage, as time and occurrants ſhall be offred, not letting ſlip any occaſion offred.

His actions are handled for the moſt, in the view and face of the enemie.

The parties to be required in a Sergeant Maior.

To eſpie aduantages.

Not to let ſlip good occaſions offred.

Gent. Is the Sergeant Maior to haue any particular companie to himſelfe, as the other Captaines of Infanterie haue?

Capt. No truly, and that for many good reſpectes: For in the abſence of the Colonell, he hath the commaunde of the whole Regiment, among the *Spaniſh Tertios*.

Gent. You ſaid that the office of the Sergeant Maior did cõſiſt in three things; that is, in the good order of marching, in the ſure manner of encamping, and in the perfect formes of imbattailing: wherefore I pray diſcourſe more at large thereof vnto vs.

Capt. Truly (Gentlemen) if you remember, I haue before at large declared touching the embattailing of men, the ordering of ſquadrons, their deuiding into *Maniples*, and the formes of ſundry kinde of battels with vs moſt in vſe: but yet to giue you content, I will repeate ſome part thereof againe. Wherefore it concerneth this officer to know how to frame his ſquadrons, to march with the ſame, and bring them to fight. Now, *a ſquadron of men is*, (as before I ſayd in folio 45.) *A congregatiõ of ſouldiers orderly ranged & ſet, by the which is pretended to giue vnto euery one ſuch place and roome, as they may fight without hindering one another, and to vnite all their forces together, in ſuch ſort that they may attaine to their principall intents and end, which is to be victorious or inuincible*. So that we ought to thinke that the armie which is beſt ordered and diſciplined, although of leſſer

To know to frame his ſquadron, to march with the ſame, to bring thẽ to fight.

A ſquadrõ what it is.

To be victorious or inuincible.

The armie beſt ordered and diſciplined, is likeſt to be Lord of the victorie.

Vegetius his reasons.

numbers, is like to be, by all reaſon, Lord of the victorie: as *Vegetius* declareth very well, giuing the reaſon why the ancient *Romanes* became conquerours of moſt nations of the world; ſaying that in greatneſſe they were not like to the *Almaines*, neither comparable in number to the *French*, neither ſo ſubtill as the *Aphricanes*, nor ſo ſtrong as the *Spanyardes*, nor ſo furious as the *Brittanes*, nor ſo wiſe as the *Grecians*, yet did they make eaſie, and anſwer all theſe diſaduantages and difficulties, by onely maintaining their people well exerciſed in armes, and practiſe of warre, and keeping them well diſciplined and reformed in manners. And for as much as ſquadrons and battels be formed of numbers of ſouldiers, more or leſſe, according to the greatneſſe of the armie, it is neceſſarie that this officer doe perfectly know, and haue in writing, the iuſt number of euery companie; as how many pikes, how many halbardes, and how many ſhot, and before occaſion or neceſſitie befall, do make a common habite in his head and memory, framing therein many & variable formes of thoſe which are now moſt in vſe, as the iuſt ſquare of men, and quadrate of ground, and the battels of many ſortes of proportions of inequalitie, with all the others whereof before I haue written. To do the which, it is moſt needefull that he be very skilfull in *Arithmetike*, for without the ſame, he ſhould hardly performe his office: and not onely to know how to embattell the companies of his owne Regiment, but of many Regiments together, and of any number: for that many times the Generall doth commaund to frame a battell of ſundry Regiments together; as did the old *Duke de Alua* at the taking of *Lisbona*, and conquering of *Portugall*. Who commaunded, that of the *Tertios* of *Naples*, *Lombardie*, and *Sicilia*, there ſhould be one battell made and framed; and of the *Tertios* of *Don Rodrigo Sapata*, and *Don Gabriell Ninio*, an other, and of the *Tertio* of *Don Luys Henriques*, another ſquadron: and that out of all the ſixe *Tertios* there ſhould be drawen 2100 ſhot, to ſerue to other purpoſes. And for as much as the Sergeant Maior was not very skilfull and ready herein, they found themſelues much puzzelled in doing thereof; and fell into many faultes, in preſence of their Generall and Princes: and in generall iudgement of the whole Campe wherein I then ſerued.

The aduantage of practiſe and good diſcipline.

It is neceſſarie to haue in writing the iuſt number of euery companie and their ſortmēt of weapons.

To haue alwayes an Idea in the head of ſundrie formes of battels.

To be skilfull in Arithmetike.

A battell framed of ſundrie Tertios by the Duke de Alua at Liſbona.

The Tertios of Naples, Sicilia & Lombardie.

Spaniſh Tertios.

The Sergeant Maior by want of skill, much puzzeled.

Gent. Truly it was a matter well worth the noting, but is there more ſortes of imbattailing then thoſe you haue ſpoken of before?

Capt. I haue already ſpoken of the moſt; yet of diuerſe nations vſed diuerſely; of all which formes I would haue the Sergeant Maior to be skilled and ſeene, although the conduction of our warres now a dayes, doth conſiſt more in ſurpriſes, aſſaults, and batteries, then open field fight, and although the beſt now in vſe, are but two or three, *viz.* the firſt ſquare of men, and the ſquare of ground, and their diuiſion into battallions of that kind, according to the weapons wherewithall we now fight.

Our warres now a dayes do conſiſt more in ſurpriſes, aſſaults, and batteries, then in main fight.

Gent. Which of theſe do you hold for moſt aſſured and ſtrong?

Capt. I hold them all for ſufficient ſtrong, but the difference which may happen, is to be iudged according to the ſituation and diſpoſition of the ground, and occaſions to fight, and by the order that the campe ſhall obſerue. For in ſome occaſions the ſquare of men would be beſt, as in open field, without aduantage of hedge, ditch, water, mariſh or wood, or where the enemie is ſtrong in horſe, to charge on euerie ſide: the which iuſt ſquare of men, in euerie part is found to be equally

The difference to be iudged by the ſituation of the ground and occaſions to fight.

Iuſt ſquare of men.

equally ſtrong, and apt euery way to receiue the charge: the which could not be ſo, were the battell ouerlong afront, & narrow in flank, as is the baſtard, broad, or baſe ſquare; but yet in other occaſions, where theſe aduantages are to be found, it were better to fight in broad front, for that thereby, many hands do come to fight at once together in the vantguard, and with more difficultie to be compaſſed by the enemie, hauing any of the aduantages before ſpoken of to friend: but moſt cõmonly, if neceſſitie, occaſion, or ſituation do not conſtraine otherwiſe, the quadrat of ground is beſt, and moſt vſed, as beſt proportioned with equall ſtrength in vantguard and reareward (eſpecially againſt footemen) and alſo flanked ſufficiently ſtrong: and which of all other doth occupie leaſt quantitie of ground.

Battell in broad front.

Gent. What meane you by Baſtard ſquare, Broad ſquare, and Baſe ſquare.

Capt. The Baſtard ſquare, is the battell which conteineth almoſt twiſe ſo many men in front, as in flanke, in proportion as 1 ¾ is to 1: the Broad ſquare is the battell which conteineth more, or as much, as twiſe ſo many men in front, as in flank, as is 2 to 1, or 2 ⅓, which is as 7 to 3: and the Baſe ſquare, is the battell which containeth almoſt thriſe, or 3 times more in breadth then in depth, which proportion is as 8 to 2, or 3 to 1, or ſuch other proportions of inequalitie, as fol. 51.

What is meãt by baſtard ſquare, broad ſquare, & baſe ſquare.

Gent. You haue before declared at large the maner how to frame all theſe ſorts of battels: therfore it is needeleſſe to demaund it againe; whereby I perceiue how neceſſary it is for the Sergeant Maior to be both learned and skilfull in Arithmeticke: but doth it import any thing, whether the ranks be of euẽ number or odde?

Capt. No truly, but a cuſtome vſed amongſt vs, without any ground: for battels are to be ſet according to the number of men, and the ſame to be framed as the ſituation of the ground will permit; therfore the number of *Par* or *Impar* doth litle import to the ſtrengthening of the battell: but the due proportioning thereof according to the quantitie of your men, to be accommodated to the ground, or ſituation; and aboue all, the braue conduction of the Commaunders and the reſolute valour of the ſouldiers, is the ſtrength and firmeneſſe of the battell.

The ranks euen or odde importeth litle.

The braue conduction of the Commaunders, and the reſolute valour of the ſouldiers, is the firmeneſſe of the battell.

Gent. What order is to be taken in ſetting of battels with ſpeede and facilitie, that the confuſion of the ſouldiers diſturbe not the ſame, eſpecially where men be vnruly, euery one thruſting himſelfe into the firſt rankes of the foreward, in ſuch diſorder many times, that neither the Sergeant Maior nor Colonels themſelues ſhall be able to frame a battell in good ſort?

Capt. The care to redreſſe this inconuenience toucheth the Sergeant Maior; and therefore he ought to giue aduiſe and warning vnto euery companie before they come to this point, that they beware of ſuch confuſion, diſorder, and diſobedience; notifying vnto them that the Enſigne or Enſignes which were of the ward that day, ſhould frame the firſt rankes of the vantgard; and the Enſignes or Companies that had the ward laſt before, ſhould ſucceſſiuely follow; and thoſe which were afterward to haue the ward, to ſucceede them againe, and then next ſuch as firſt were gathered to the ſquadrons.

A politicke order to be obſerued, in ſetting a battell when the ſouldiers be vnruly.

Moreouer giuing aduiſement to the officers, that they ſuffer none of the ſouldiers of their bande to come without their armour, by peece-meale and vnfurniſht: for by ſuch faults, although that by the aforeſaid reaſons, the vantguard appertaineth vnto them, yet they looſe their preheminence, for comming ſo ill armed; and iuſtly may others, better armed, be placed in their roomes.

No ſouldier to come with his armour by peece-meale or broken.

Gent. And if(perhappes)vpon the Alarme giuen(as commonly it falleth out) all the Companies in Armes, doe ioyne and gather together, vnto the Corps de guarde or place of aſſemblie,in ſuch a caſe, what is the Sergeant Maior to do?

An order to frame a ſquadrō, of vnruly ſouldiers vpon the Alarme giuen, or ſuddenly.
A fine checke of vnruly ſoulduers.

Capt. He ſhall frame together that confuſed and diſordered body, placing the Captaines before: and ſhall draw his battell from out one of the flankes, or out of the rereward, as he ſhall finde it moſt commodious:the which he ſhall doe with great facilitie,and thereby ſhall defraude thoſe that were cauſe of ſuch confuſion: and it ſhall ſerue vnto two good effectes: the one, he ſhall frame his battell with ſpeede, and the other, he ſhall by this meanes chaſten the vnruly and diſobedient, by leauing them in the rereward,who ſeeing this order taken by the Sergeant Maior,will euer afterwardes, be more obedient and tractable to be ſet in order.

Gent. But the battell or ſquadron of pikes being ſet, in what order is the ſame garniſhed with ſhot, and how many and great ſhall the ſleeues thereof be, and how farre diſtant placed from the pikes? for I haue heard different opinions therein;whereof,although you haue ſayd ſomwhat already,yet I pray,let vs heare ſomething more of the ſame.

The due & naturall girdling with ſhot.

Capt. No ſouldier is ignorant, that the ſquadron of pikes being ſet, is to be impaled or girdled with ſhot, as many rankes of ſhot, as pikes. But the due and naturall girdling indeede, ought to be no more ſhot in ranke, then that the pike may well couer and defend, eſpecially where the enemie doth abound in Caualleric. And ſo vnder the defence and fauour of the pike, there cannot conueniently ſtand aboue one ranke of three ſhot at the moſt,and ſo many(in mine opinion) ſhould the girdling conteine: the which girdling ſhot, kneeling vpon one knee, vnder the couert of the couched pikes,ſhould, at the charging of the horſemen, diſcharge their vollie in their face and boſome, which would bee no ſmall galling vnto them. But when this daunger of horſe is not to be feared, then the impalement may be made of more ſhot in a ranke, at the diſcretion of the Sergeant Maior,according to the quantitie of ſhot contained in his companies, and the reſt of the ſhot to be deuided into ſundry ſmall troupes (as I ſayd before) to troupe round about the battell, with ſome reaſonable diſtance from the ſame:the which manner of ſmall troupes, I eſteeme to be farre better then the ſleeues conteining great numbers, and more ready to be brought to skirmiſh,euery ſeuerall troupe to be led forth by his Caporall,and ſome Captaines to ouerſee the whole.

When and how to diſcharge their vollie.

Shot in ſundrie ſmall troupes trouping round about the battell.
Euery troupe to be led forth to skirmish by their Caporall.

Squadrons of muskets at the angles of the battell.

Moreouer, I would thinke good, at euery angle of the battell to be placed a good ſquadron of Muskets, which ſhould ſerue to flanker it euery way, euen as the *Caualleros* or *Trauaſſos* do the curtaine of a fort:ſo that a well framed battell or ſquadron of pikes,well impaled with ſhot, and anguled with ſquadrons of Muſkets, ſeemeth a Caſtell with his *curtaines Caualleros*, and ditches: the manner whereof being framed of expert & reſolute men,is of wonderfull force,the which was well to be ſeene in the iorney of *Caruā* in *Barbarie*,where *Don Aluaro de Sandy*, with 4000 *Spanyardes*, foote ſouldiers of great valour, made a braue famous retraict,the ſpace of 4.or 5.myles in a champion field, being beſet and charged by *Cydearfa*, king of the *Moores*, with aboue twentie thouſand horſe,at the leaſt fiue or ſix times, with the loſſe of onely 80 men of his; and the ſlaughter of ſeuen or eight hundred of the enemy. Which is a gallant example what braue footemen may do,being conducted by a good chiefe.

A braue retraict of Don Aluaro de Sandy made in Barbary, with 4000. foote againſt 20000. horſe.

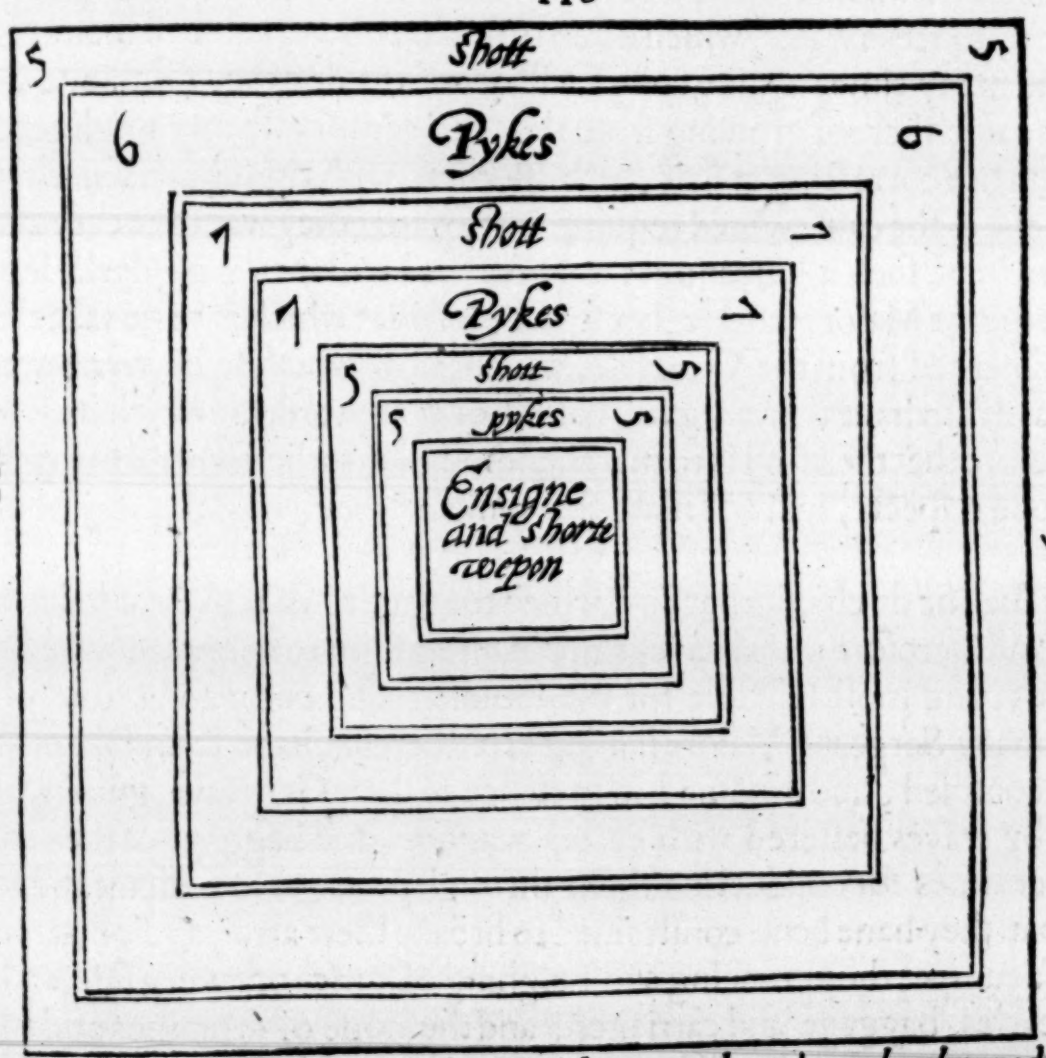
Gent.

Gent. Your orders and reaſons doe like me very well: but yet of one thing I ſtand in ſome doubt, and would gladly bee reſolued therein, which is, that our bandes and companies of infanterie, haue commonly two thirds of ſhot, vnto one third of pikes, ſo that the battell empaled, ſleeued and anguled with ſhot, there will yet abound and remaine good ſtore of ſhot neuertheleſſe. Now where ſhould thoſe be beſtowed, to bee ſafe from the fury of horſe, if the enemy ſhould therein greatly abound?

Capt. Your queſtion is good, and I my ſelfe haue bethought me many times thereupon: wherefore if your ground be ſuch that the enemies horſe may charge you but vpon two parts at the moſt at once, then may the ſhot retire ſafely on the contrary parts: but if you be imbattailled in open *Campania*, without any aduantage for you, and your enemy very ſtrong in horſe, and you few horſe or none to reanſwere them, then (in mine opinion) the ſureſt way is thus (as I ſayd before) in ſpeaking of lining of battels with ſhot, firſt to place 5, 6, and 7 rankes of armed pikes, or more, and girdle them with 5 rankes of ſhot, cloſe vnder the gard and ſhelter of the pikes, on the out ſide: then againe within thoſe firſt rankes of pikes, 3, 4, or 5 rankes of ſhot, then certaine rankes of pikes, and then ſhot againe; and ſo conſequently, as your numbers and occaſions ſhall require, as in this figure appeareth.

An order for the ſafegard of ſhot in open campania, where the enemy aboundeth in horſe.

116



116

This battell containeth 116 men in ranke euery way; ſhot and pikes lined together, as you ſee: the whole number amounting vnto 1345 6 men; each man hauing 3 foote ſtation, is 70 paſes in front ſquare.

The figure of ſuch a battell of mixt weapons.

Here is to be noted that in ſuch caſes where your battel may be charged on euery part or ſide, that then thoſe rankes in flanke which haue a wider diſtance then thoſe men which are in front, doe march vp cloſer together, whereby they may make the front of equall ſtrength and diſtance, of ſtation euery way.

Declaration of the figure.

In this figure first you see placed the girdling shot 5 in a ranke, vnder the gard and succour of the pikes, then 9 rankes of pikes, then certaine rankes of shot, and then pikes againe; and so consequently to the center, where is placed the ensignes, and short weapon, and munition. The girdling shot vpon the very charging of the enemies horse, and at the couching of their pikes, may (kneeling vpon one knee, the better to be vnder the couert of the pikes,) discharge in the bosome of the enemy, not aboue twentie pases of: and then the pikes being couched, the other rankes of shot, contained within them, are to discharge close ouer the heades of the couched pikes before them, and so successiuely as the other pikes shall bee couched the shot contained within them shall discharge. So thus (in my conceipt) would this order containe in safetie, the most part of your shot, and bee sufficient strong, and a great gauling vnto horse.

Gent. This order I thinke to be good, where the enemy aboundeth in number of horse. But now I pray tell vs what order is the Sergeant Maior to take and obserue, when these companies do march?

Great skill and care in the marching of an Army.

Capt Herein consisteth great skill, care, direction, and discipline; for generally men be loth and vnwilling to be tied to any strict and painefull order, especially *Besonnios*, wanting practise and patience; for vpon euery light occasion, they will breake and disaray, as when they come to any straight or vnplained way, or when they feele themselues a litle wearied or chafed with heate, running on euery side disorderly to seeke water, which often times hath bene cause of many defeatments. And many times againe vpon small occasions doe they dismande themselues, the cause thereof growing from the ouer remisnesse and negligence of the officers, in not correcting at first, such disorders with rigour and scuerity, as the vrgentnesse of the cause would require, and for that they want the care and diligence to redresse such misdemeanours, as hereafter I will speake of, declaring first what the Sergeant Maior is to doe, being in *Campania*: which is to go take the orders to be obserued from the Generall, and to know whether his *tertio* or regiment is that day to haue the vantgard, battell, or reareward; the which he is to do the night before that the army is to march, although that the General many times for many good respects, will not make the same knowne, vntill the very houre of marching.

The disorders of souldiers do many times grow through remisnesse and negligence of officers.

What the Sergeant Maior is to do, being in the open field with the army. Vantgard, battell, and reareward.

And this shall he do chiefly that day, which toucheth his regiment to haue the vantgard. And therefore it is alwayes important for him to know the wayes most commodious, and most salliable for the souldiers and companies out of the campe: for many Sergeant Maiors hauing erred herein, haue found themselues puzzelled, confused, and ashamed in presence of their Generals, guiding their regiments by wayes pestered with cartes, wagons, and baggage of the campe. And at other times for conducting them through passages so difficult and combersome, that they haue bene constrained to breake their arraies. For at the remouing of a campe, the prauncing and neighing of horses on euery side, and the crossing of cartes, baggage and carriages, and the noise of drummes and trumpets, is such and so great, that (if he be not very preconsiderate in the same, and know well the way, where hee is to conduct his companies) he runneth many times into those inconueniences: and chiefly when the campe doth dislodge by night, or in dayes mistie and darke, for then is the daunger most to bee doubted:

To know the wayes most salliable, for the souldiers to march.

Great noise and rumor in remouing of a campe.

therefore

therfore it importeth much, that the Sergeant Maior be very skilfull in the region and countrey where they are to paſſe, and to know the diſtances from place to place, and the qualities of the wayes and paſſages, with their ſtraights, and incloſures, their hils, vallies, riuers, brookes, lakes, moores, meddowes, fields, open or encloſed, foreſts, woods, thickets, or whether the countrey be ſtony, plaine field, or ditched, and all difference of ſituations of grounds, as well of the hils, and high mountaines, as of the plaine and champain; to the end, that he may conſider, foreſee, preuent, and prepare for euery place where the enemy may annoy him. For many times one regiment is to march alone, and then doth it touch the Sergeant Maior to haue the care and ſpeculation hereof, as it doth the Campe-Maiſter Generall when the whole army marcheth, for that it befall him not, as it did vnto the Romaines in the *Furcas Caudinas* and vnto many other through the like miſregard. And for more ſecurity hereof, they are to procure faithful and truſty guides, and skilful way leaders, to the end not to be beguiled and abuſed, as *Hannibal* was, when he warred in *Italy* againſt the Romaines, who willing to leade his army vnto *Caſſinum*, was led and guided vnto *Caſilinum*, to be put into the hands of *Quintus Fabius Maximus*, Generall of the Romaines his enemies.

To be skilfull in the countrey where they are to march.
Sundry conſiderations.
To what end.
Examples of the Romaines at Furcas Caudinas.
To procure faithfull and truſty guides.
Hannibal deceiued.

Now the order being knowne, and the way reknowledged, and the houre of remouing at hand, he is to commaunde the drumme maior to ſound the call *Recoia* or aſſembling, and euery Captaine of infantery to cauſe their baggage to be truſſed vp and laden, and ſhall ſtraight wayes draw foorth his enſignes out of their quarter into the place of armes, and there ſhall frame his battell or ſquadron, reparting their Captaines into ſuch places as concerneth them that day, and ſhall diſpoſe and appoint the Sergeants of ordinary bandes in ſuch ſort, that euery one may know what part he hath to gouerne and ſet in order. And for as much as it is ſeldome ſeene, that the wayes, fieldes, and paſſages be ſo large, that the whole battell may march all in front, he is to frame his ordinances arraies or *Maniples* no greater, then that the ſame may march commodiouſly and at eaſe thorough the ſame, the order whereof I haue at large declared in folio 62, 67, 68 and 92: alwayes prouided, that he quarter or deuide not his battell (if the paſſage will ſo permit) into no leſſe then the third part of the front thereof, as thus, if the front be of 27 pikes, the *Maniples* or ordinance ſhall be of 9, and if 21 in front, then the deuiſion or quartering ſhall be of 7 in front, and ſo of other numbers: for he is to conduct his companies ſo well diſciplined and ordered, that occaſion being offered, hee may with ſpeede and readineſſe frame and ſet his battell, or battallions, reparting the Captaines and officers in places moſt conuenient, as before is ſayd.

To cauſe the drum maior to ſound the recoia or remouing.
The Captaines of footmen.
To aſſemble the companies in the place of armes, and there to frame his ſquadrons.
The Sergeants of bandes, what to doe.
To deuide the battell into Maniples, if the paſſage be narrow.

Gent. But tell vs how is he to repart them, and who ſhall go in the vantgard; which in the battell, and who in the reareward; and in what part ſhall the Colours be placed, that this readineſſe and quicke diſpatch, might be performed in ſetting the battell as you ſpeake of?

Capt. The order I haue partly ſpoken of before; but to giue you content, I will repeate it againe: therefore me thinkes that the order to be obſerued therein, is thus. That the ſhot of the forlorne hope, and the ſhot of the right flanke (being deuided into many ſmall troupes as I ſaid) ſhould march before, then next, the girdling ſhot, of the ſaid right ſide; after them ſhould follow the ordinances and *Maniples* of pikes, in ſuch ſort & order as before is declared: & to the end that

The order in marching of vantgards, battell, and reareward.

The enſignes where to be placed fitteſt.

the enſignes go not croſſed either in one ſort or other, he is to place them alone after another, within ſo many rankes of pikes, ſo that when ſoeuer he brings his *Maniples* vp together pouldron to pouldron, to the framing of his battell, they may ſtill remaine in their conuenient places, which is in the center.

Then after the pikes ſhall follow the girdling ſhot of the left flanke, and laſt of all in the reareward ſhall follow the troupes of ſhot belonging to the left flanke, and reareward, and hauing paſſed the ſtraight, and the ſquadron formed, then may they repaire each girdling ſhot, and troupes to their due and conuenient roomes, as before; of which orders of *Maniples*, and quartering of battels, I haue before declared at large.

Hauing paſſed the ſtraight to march vp pouldron to pouldron againe.

Gent. Is there any meaning or miſterie in marching the left or right ſide ſhot before in the vantgard.

Capt. None truly, that I know of, more then that in all our actions we ought to incline what we can vnto perfection: and as the right hand is the more perfect and noble, from thence it is reaſon, that wee begin to frame our battels, and in that place alſo to begin to diſſeuer them.

In all our actions to incline to perfection.

Gent. The munition, and baggage belonging to the Companies, where are they to goe, to cauſe leaſt hinderance, and to paſſe in moſt ſecurity?

Capt. The conſideration that is to bee had when an army doth march, is, that if the enemy be knowne to be on head the vantgard, vpon the way you are to paſſe, then let the munition and baggage be placed in the reareward; and *per contra*, if the enemy be found to be in the reareward, then paſſe your baggage to the forward: and if on the right ſide, then conuay it to the left; and if on the left ſide, then tranſport it vnto the right, with the like conſideration, and in this ſort ſhall the campe be alwayes a wall and defence vnto the munition and baggage. And if in marching the enemy do offer to fight, the munition by this meanes, ſhall be no let or hinderance at all. And beſides all this, there ought to be ſent abroade certaine Hargulutiers or light horſe, to ſcoute before the munition and carriage, to preuent the ſuddain incurſions of the enemies ſtragling horſe. The ſame order ought alſo to be obſerued in the marching of one regiment alone. But in caſe that there were no enemy, and they might march through places plaine, ſafe, and ſecure, the munition and cariage ought alwayes to paſſe in the foreward, with a ſufficiēt gard of pikes, ſhot, and ſhort weapons; & that for good reſpect, & becauſe it is very commodious for the ſouldiers, that when they come well wearied to their quarter, they may find their tents ready pitched, and many times their forrage prouided, and not to ſtay attending and expecting the ſame, comming many times, wet, dirtie, ouer tired, and halfe dead with hunger: and againſ if by hap any of the cariages do fal, the owners of the baggage may help to redreſſe, wherby to ſaue their baggage and furniture: which could not be done if it marched in the reareward.

Conſiderations to be had where the munition is to march.

Certaine light horſemen to be ſent out to ſcout before the munition.

In countries ſecure from the enemy, the munition is to paſſe before with a ſufficient gard. The reaſons.

Gent. But if it ſhould happen, that in none of theſe ſayd parts, the baggage might march in ſafety (as in *Barbarie*, or other *Champaine* countrey, where the enemies number conſiſteth moſt of horſe) & we not hauing ſufficient numbers to anſwer them, what is then to be done, where the enemy may charge on euery ſide?

Cap. Then in the center of the battell, or betwixt the ſquadrons, with their conuenient gard, as before is ſayd: for beſides that little which the ſouldier hath, and carrieth the ſame there, it is reaſon he defend and keepe it; ſo in the like ſort he is to procure that the enemy detruſſe him not thereof, neither the enemy to glory

In parts of danger the munition is to march in the center, or among the ſquadrons.

that

that perforce he hath diſpoiled vs of any thing, for the great part of reputation which is loſt thereby: but if the ſame may not bee conſerued without manifeſt danger, and the ſquadrons thereby to bee diſaraied, then ought it to bee forſaken and left: the which many braue commanders haue not onely done, but ſome haue left their carriage to the enemy of purpoſe, to the ende that by rifling the ſame they might fall into ſome diſorder; by which meanes and pollicy they might the ſooner defeat them, and obtaine the victory: as did *Proſpero Colonna* and the *Marquis de Peſcara* at the battel of *Vicentia* in *Italy*, whereat the *Venetians*, and the Captaine *Marquis Aluiano* were broken and ouerthrowne.

Better to loſe the munition then to hazard the whole army. The munition forſaken ſometimes for policie ſake. Example at the battel of Vicentia in Italy.

Gent. The foote ſouldiers horſes and their boyes, where are they to go when they them ſelues mount on horſe backe, and their boyes do cary their weapon and armour in their Maiſters roomes?

Capt. I would wiſh as few horſes as might be with the foote companies, but only for ſome officers and ſick perſons: but for ſuch as be, it is manifeſtly knowne, that it is forbidden by al good diſcipline of war, that no foot ſoldier do paſſe out of the campe or alodgement on horſebacke, neither on horſebacke to enter into the ſame, but alwaies at ſallying he acccompany his colours, at the leaſt a mile, and before the arriual to their allodgement, the like. To do the which, their horſes may go by one ſide of the battell, if the way will permit it; and if not, then at the traine therof, vntil they haue licence granted to mount; and yet not that to be permitted, vntill their foot Captaine be firſt mounted; and then may they mount on horſebacke, and put them ſelues in order with the Captaine or officer that is to conduct them, and to this effect ſhould the Sergeant Maior name and appoint ſome one. And if they be of the ſhot of the vantgard, then are they to follow their vantgard troupes of ſhot; and if pike men, then to follow their arraies or *Maniples* of pikes: and in like ſort ſhall the Hargabuziers of the reareward do, placing themſelues in the traine of their troupes, and ſhall ſet their boyes and pages with their armes in their roomes and places, to the end that if occaſion be offered, euery mounted ſouldier may alight, and ſteppe to his roome and place, without diſordering their ordinance or arrayes at all. In the like ſort ſhall ſuch foote ſouldiers as haue boyes carrying their armes, do: and when occaſion is for the ſouldier to take him to his armes, hauing receiued the ſame from the boyes, let the boyes be ſhifted out of the battell: for I hold it not for good, as I haue ſeene ſome Sergeant Maiors, to place thoſe boyes neare vnto their Enſignes, either before or after them: for by this meanes may the battell bee diſordered and broken, and none of thoſe which mounted on horſebacke, can readily find their due roomes and places. A thing which the Sergeant Maior ſhould greatly regard, to keepe his companies alwayes in good order.

As few horſes as might be to be permitted in foote companies. Noe foote ſouldier to paſſe out of the campe on horſebacke. Where the foote ſouldiers horſes are to go. The orders to be obſerued when the foot ſouldiers do mount on horſebacke. The boyes to be ſhifted out of the battell.

Gent. In their marching ſhould not the ſouldiers make ſtayings and pauſings, to eaſe and reſt themſelues.

Capt. It is very neceſſary that they make ſome Altoes or ſtandes to eaſe them, and that they might refreſh themſelues with ſuch ſhort victuals as they beare along with them, and by a litle repoſing, they may breath and eaſe them of the wearineſſe of the way, and ſo conſerue themſelues in good order. For although the ſouldier be neuer ſo much practiſed and inured, and though the ſhot may ſuffer the wayes trauell without any great pawſing, yet the pikemen, as men laden

To make ſundry altoes or ſtands, to eaſe and refreſh the ſouldiers.

with their armour, are not able to endure the ſame, eſpecially in dayes of ſcorching heate, without daunger of ſickneſſe, or bruſing of their bodies. Therefore the Campe-maiſter or Sergeant Maior ought to be very conſiderate and carefull, to cauſe the ſtandes to be made, as the commoditie ſhall be offred, and neceſſitie require it, to the end, no diſgrace might befall them. And for that it hath bene ſomtimes ſeene, that the Sergeant Maiors taking litle regard hereunto, haue conducted their Regiments very diſorderly, making a long trace file or lyne (as it were) of them: the vantguard diſtant from the rereward at the leaſt three or foure myles; in ſuch ſort, that by much leſſer numbers then the numbers of their owne companies, they may many times, be beaten and ouerthrowne: as it chaunced vnto the *French* armie in *Lombardie*, being defeated by *Antonio de Leyua*, gouernour there, for the Emperour *Charles*, at their marching towards *Via graſſa*, their Commaunder, the *Countie Sanpaule* being taken: for hauing paſſed too forward with his vantguard, leauing behind him more then was conuenient, the *Countie Guido de Rangon* with the ariereward, who had the charge thereof. The Sergeant Maior is therfore to be carefull, to make alwayes his ſtandes and Altoes neare vnto ſome good waters, the officers taking great care & watchfulneſſe, that in thoſe ſtoppes and ſtayings, the ſouldiers diſmeanour not themſelues, nor range not diſorderly vnto the next adioyning places, nor runne into orchardes, nor gardens to riſle and ſpoyle, for it is contrary to good militarie diſcipline.

Carefull to make the Altoes or ſtads in places conuenient and fit.

Diſorderly conduction cauſes of ouerthrowes.

Example at Via graſſa in Lombardie, when the Cõtie Sanpaule was taken.

To make alwayes the ſtandes neare freſh waters, and to be carefull that the ſouldiers ſtraggle not.

Gent. When the campe doth march, paſſeth the Sergeant Maior on foote or on horſebacke?

Capt. On horſebacke; For vnto this officer onely is his horſe allowed him, and at all times to ride, and into euery part, and vpon any occaſion, and to trauerſe and paſſe through the Arrayes of the battell, viſiting, prouiding, and ordering all things concerning the ſame; and alſo to take the word from the Generall: and being on horſebacke, if he chaunce to meete him, he is not to alight, as ſome vnskilfull Sergeant Maiors are wont to do. For the ſollicitude, care, and readineſſe, apperteining to this office, is ſuch, and ſo great, that it requireth he enioy ſuch a preheminẽce. Neither yet in the day of battell ought he to diſmount, nor enter into rãke with the other Captaines, as ſome will ſeeme to ſay; for in the fight he ſerueth but for one, but being on horſebacke, he may value for many, in viewing, reuiewing, ordering & redreſſing many & ſundry occurrãts, which in ſuch times are offered, importing many times the good ſucceſſe of the victorie, & therfore he is to go armed but lightly, with a ſhort baſton or trunchion in his hand, which ſhall ſerue him to apart horſes, cariages & baggage, which oftentimes do diſturbe & hinder the ſquadrons, & to ſhew and point with the ſame ſome things that he cõmaundeth, and orders that he ordaineth to be done, and ſometimes to correct therewith the diſobedience of vnruly ſouldiers: whereat no man ought to be offended, or take it for any affront, ſith it is done for corrections ſake.

The Sergeant Maior is alwayes to paſſe on horſebacke, & to what effectes.

If he meete the Generall, not to alight from his horſe.

Nor yet to diſmount from his horſe in the day of battell, and wherefore.

His armour light with a ſhort trũchion in his hand.

No affront to the ſouldier, deſeruing it, to be corrected by the Sergeant Maior.

Gent. In what part ought the Sergeant Maior to ſtand or go, when the armie doth march?

Capt. The ordinarie place of the Colonell is the vanguard; and ſo the Sergeant Maior, being his officer, by whom he ſendeth his Commaundes vnto the Captaines, Enſignes, and Officers, ought alwayes to be neare vnto his perſon.

Where the Sergeant Maior is to paſſe, whẽ the army doth march.

Gent. But if the enemy be knowen to be behind or after your rereward?

Capt.

Capt. In such case he shall remaine in the rereward, but to assist there in such sort, as he forget not to make the Alto or stand sometimes, and to stay vntill he hath passed through all the arrayes of the marching squadrons or armie. And if he finde that the Sergeants do not their duties, in keeping the souldiers in good order and array, he shall seuerely reprehend them for the same, being a thing of such importance, and that no negligence be found in conseruing due order and array, so that none might be broken if possible it were. And if the arrayes be broken, as somtimes it happeneth by reason of the straight passages, it behoueth him to be very ready & vigilant to redresse them againe, and if to do the same it should neede to make a stand, an officer is presently to be sent to the Sergeant Maior: and neither Captaine, Alferes, nor any other officer to passe the word, *stand*, either to this effect or any other, as it oftentimes falleth out, crying *stand*, or *march*, from hand to hand, vnlesse the necessitie be so vrgent, as not permitting time to signifie the same vnto the Camp-maister or Sergeant Maior. For by reason of this abuse of euery officer to passe and giue the word, vpon euery small occasion there do succeede many inconueniences, and is as much as to vsurpe the prehemin̄ece, which onely is due to the Camp-master, as head of the Regiment, and vnto the Sergeant Maior, as guide of the battell. And therefore it is very necessarie, that the souldier or officer which so shall do, to be well punished for the same. And the Sergeant Maior is to be carefull, that the Captaines and souldiers which are on horsebacke, do alight, & set themselues into the arrayes, a good myle before they come vnto their allodgement, the which ought to be first viewed by himselfe, or his coadiutor, somewhat before the companies do arriue, and at their arriuing to frame his battell in the place thereof, and not to suffer any souldier to passe vnto his quarter, or to dismaunde himselfe in the order, vntill the whole Regiment be all entred; and he, or his coadiutor in his name, comming vnto the companies, do licence them to their lodgings and quarter.

But if the enemie be known to be in the rereward he is to passe in the rereward.

To reprehend the faults of the Sergeants.

If the arrayes be brok̄e to be ready to redresse them.

No Captaines or other vnder officers to passe the word, stand; but the Sergeãt Maior, or other superior officer.

The Camp-maister as head of the Regiment, the Sergeant Maior as guide of the battell.

The foot souldiers to alight frõ their horses a myle ere they come to their lodging.

The place of a-lodgement to be first viewed by the Sergeãt Maior.

At their arriuall to frame his squadrons in the place of armes.

Orders to be obserued at the a-lodgement.

The place of armes to be kept all free and vnpestered.

The which ensignes are placed in the front of the quarter of euery company, all in one ranke, and from thence downeward the souldiers to be lodged. And the Sergeant Maior shall not permit nor suffer any cariage or baggage to be put before them, nor pestered within the place of armes, neither any fire to be there made, nor any other impediments; for from thence forward, it is onely a place of armes or assembly, and is to bee left free and vnpestered for onely the battell when it is to be set.

THE SECOND DIALOGVE.

VVherein is declared, of the encamping of an army: the placing of the corps deguardes, scoutes and Sentinels: their seuerall duties: the order of visiting and reuisiting the Sentinels, and their relieuing and changing: the order of giuing and taking the word, with sundry other martiall points, appertaining to such cases.

The Sergeant Maior what he is to do, at the first encampement of the army.

Gentleman.

IN lodging and emcamping the regiments or army, the which being setled, the Sergeant Maior, what is he then to do?

First to draw forth a corps de-guard some 80 paces without the ring of the encampement.

Capt. Presently to draw forth a corps de guard, about threescore or fourescore paces from the face of the encamping, of some fiue and twenty or

thirtie ſouldiers, and thoſe are to bee of one of the companies which was of the watch the night before, ſith that vntill a freſh watch doe enter, and the 24 houres bee fully accompliſhed, it appertaineth vnto them that entred therein before, except a whole company be ſet there by day to the ward; and in ſuch caſe it belongeth to the companies of ſhot, if there be any particular ſhot companies in the campe. And this Corps de guarde which is to bee drawne out, is to be ſet in the ſelfe ſame place where the company of the watch is to bee placed at night.

The orders to be obſerved.

This being done, hee is to reknowledge his quarters very well, and to ſee if there be any neede to raze plaine any places, that the ſouldiers may commodiouſly ſallie foorth to the Alarme for it falleth out many times, that the companies be lodged in orchards, gardens, vine yards, and among buſhes, from whence they cannot come but with ſome difficulty, the which he is to redreſſe; and to make plaine and eaſie any thing that may empeach and hinder the ſpeedy ſetting of the battell, and framing of the ſquadrons; which as well for this purpoſe, as for the fortifying of the campe, and leuelling the wayes and paſſages for the artillery, with ſuch other ſeruices, there is alwayes in the campe certaine companies of pioners, the iuriſdiction of whom doth belong vnto the Generall of the artillery, or to the Campe-maiſter Generall, vnto whom he is to repaire, to prouide him with ſpeede of ſuch as ſhall be needefull.

2 To reknowledge the quarters and to reforme all incombrances.

Pioners to amend tombersome waies.

And if the whole army be there, he is to go vnto the Camp-maiſter Generall, and know of him how many enſignes of his regiment are to be put to the watch, and in what place or part, and what companies are to gard the munition, and in other moſt conueniēt places for the ſeruice & ſecurity of the campe; & ſuch as are to go abroade to diſcouer, aud to ſcout, and who are to prouide wood, water, and other neceſſaries; and what companies are to aſſiſt in making the trenches, and bulwarkes, and other fortifications, reparting the ſame workes amongſt all the bandes of his regiment (for vnworthy is he the name of a ſouldier, which will not put to his helping hand in ſuch caſes) in ſort that euery one haue their ſhare of the labour in order. But if he be with his owne regiment alone, it then concerneth him to reknowledge, foreſee, and to prouide and giue order for all: and to place the Sentinels in ſuch order and diſtance, that no man may paſſe out, nor enter into the quarters of the alodgement without their view and ſight. And if his regiment be ioyntly with the other regiments or *tertios* of the ſame nation, or of another, he is to conioyne with the other Sergeant Maiors, and conſult, counſell, and concurre with them touching the placing of the gards and Sentinels: ſo that there may be found no negligence nor imperfection, ſith all this office conſiſteth in care, vigilancie, readineſſe, and order.

3 To go to the Campe-maiſter generall or his marſhall, to receiue orders from him to ſundry purpoſes; as for the watch, the ward, gard for the munition, to ſcout, and diſcouer, who to prouide wood, and to aſſiſt in trenching.

Being with his owne regiment alone, what he is to do.

The Sentinels how to be placed.

To conſult with other officers.

It concerneth him alſo, to go vnto the Generall for the word, and to receiue the order and courſe to be followed the next day, and to go preſently vnto the Campe-maiſter to ſhew him thereof: although that ſometimes the Campe-maiſters or Colonels themſelues doe take the word and order from the Generall, and giue the ſame vnto the Sergeant Maiors, yet properly the doing therof doth appertaine to the Sergeant Maior his office.

To go to the Generall for the word, and orders to be obſerued.

And as touching the watches and gards, he ought to haue great conſideration, not to place them, if the enemy be at hand, before the entring in of the night: for

To haue great care in placing the watches and gards.

he

he ought to preuẽt, if possible it might be, that the enemy perceiue not where he setteth his watches and Sentinels.

And when it were time hee shall call together the company or companies, which should bee of the watch; the which are to be aduertised thereof from the morning, by the Drumme Maior of the regiment, and he is then to set them in their places, the which as I said, ought to be reknowledged and viewed, and shewed vnto the Sergeants of such companies where they are to place their Sentinels, and he is to appoint them what order they are to keepe in going their roundes: alwayes reseruing a particular care, to visite and reuisit all the before appointed matters and orders.

To fore aduertise the souldiers by the drumme maior.

To reknowledge and view the places of gard and Sentinels.

To appoint them the order in going the roundes

To visit and reuisit all the aforesaid orders.

And if he shall find any negligence or carelesnesse in such officers, he is to reprehend and chasten them with such seuerity as the case and cause shall require, for in the not executing the same, he becommeth to be contemned, vnrespected, and his commandes and orders misprised: and so by consequence to introduce a very corrupt discipline.

To reprehend the faultie.

The negligence of Commanders breedes contempt in souldiers.

Gent. What distance from the quarters and campe should the gards and watches be placed and set.

Capt. In encamping an army, it is accustomed most commonly to entrench round about the quarters thereof, for more security and strength to the allodgement: and when it is so, the companies which haue the ward, are alwayes to sallie to gard the trenches, which is the wall of the campe. But in case there bee no trenches, the Corps de gard (in mine opinion) is not to be placed aboue 70, or 80, paces distance (as I haue said before) from the front of the allodgements in his place of armes; yet somtimes there be found ditches, bottoms, and vallies so strong, that it shall be good for the gards to be placed there, although they be farther distant off, then I speake of; for such strengths by nature do serue and stand in steede of ditches and trenches. But not finding such naturall fences, the watches are to be placed, as before I haue sayd. For thus, as well for the security of the quarters, as for (if neede should require) to succour those companies, it is better they be placed neare then farre off. And it is to be noted, as a thing of great importance, that great silence be kept in the body of the watch, at the least all rumour and lowd noises are to be excluded, and in their conuersations to talke modestly, stilly, and with low voices.

The encampement to be entrenched.

Where the corps de guard to be set.

Naturall fence, good.

Great silence is to bee kept in the body of the watch.

Gent. And the Sentinels, what distance should they stand from the Corps de guard?

The Sentinels what distance asunder, and from the Corps de guard.

Capt. About thirtie paces, litle more or lesse.

Gent. And how farre the one from the other?

Capt. There ought to be no more distance betwixt them, then that they may easily discerne one an other, how darke soeuer the night be. For the Sentinels, being the wall of the campe, & which do serue that no body may enter in, nor passe out thereof, without being seene and discouered, now if they should be placed too wide a distance off, that would not follow, which is pretended.

The Sentinels the wall of the campe, therefore neare together.

Sentinels better double thẽ single.

Gent. And those Sentinels are they to be single?

Capt. No, but double, for foure eyes may see and discerne better then two, and because, if sleepe do assaile them, or could, the one (oppresst with sleep) might walke, and the other stand vigilant at the watch, with all stilnesse and silence, and

The Sentinell vigilant, silent and carefull.

without talking, with open eyes, and ready liſtening eares; for many times it chanceth to heare that, which the obſcureneſſe of the night will not ſuffer to ſee: and if they do perceiue, heare, or ſee any thing, whereof they ought to giue aduiſe to the officers, let the one go thither, and the other ſtay, and not to leaue the Sentinell poſt forſaken: and therefore, for theſe and ſuch like cauſes, it is much more ſafer, requiſite, and needefull that they be double. But thoſe which are ſet yet 30 paſes farther, are to be ſingle, which of ſome are improperly called *forlorne Sentinels*, not hauing the word, as the doubles haue, the which are to be placed in the ſame diſtance, as are the firſt, and commaund and order giuen, that in deſcrying any thing, they are to retire to the poſt of the double Sentinels, and giuing aduiſe and notice of what they heard or ſaw, are to returne to their places, without giuing the Alarme: but in caſe that there were any notable number of horſe or foote diſcouered, in retiring vnto the double Sentinels, & all three perceiuing the ſame for certaine, and affirming it, then the Alarme is to be ſtriken, and in other ſort, not: For many times, vnto one man alone, feare or imagination doth cauſe few people to ſeeme many, and many things to ſeeme to be, which are not indeede: and at no time, is the Alarme to be ſtriken in the campe without good and vrgent cauſe. For remedie whereof it is a matter of great importance, that the Sergeant Maior, euery night, at different houres, doe ordinarily viſite and reuiſite the watches and Sentinels, as well to ſee that they obſerue and performe his orders and commaundes, as to the ende that the officers and ſouldiers, vnderſtanding his courſes taken, be more vigilant and carefull in their watches, fearing to be puniſhed if they incurre into any defaults and negligences.

In hearing or ſeeing any thing wh at the Sentinell is to do.

The ſingle Sentinels, where.

His dutie what to do.

Not to giue Alarme, but vpon reaſonable cauſe. When to giue the Alarme.

Feare and imaginations do diſturbe mẽs ſenſes.

To viſite and reuiſite the Sentinels, at ſundry houres in the night, to good effectes.

Gent. What call you the *forlorne Sentinell*, ſith you ſay, they are improperly ſo termed?

Capt. The proper *forlorne Sentinell* is that, which is ſet, either on horſe-backe or foote, as neceſſitie ſhall require, neare vnto the enemies campe; to the end, to eſpie and giue aduiſe if any companies or troupes ſhall ſallie thereout, or if the campe do remoue ſecretly. And this ſuch Sentinell is to be placed in ſome part ſo neare vnto the enemie, that being diſcryed and ſeene, he ſhall with great difficultie retire and eſcape: and is neuer ſet but vpon neceſſitie of ſuch like aduiſes: As when *Frauncis* the *French* king, did relieue and victuall *Landreſie*, which the Emperour *Charles* held beſieged, who determined to giue him battell the next day before he were departed; and ſo *Don Fernando de Gonzaga*, who was Generall, commaunded Captaine *Salazar* that he ſhould that night put himſelfe neare vnto the enemies campe, therby to vnderſtand their deſſeignes and intents: but he miſſed to effect the ſame. So the *French* retired in ſafetie and wel without any perceiuing thereof. And thus theſe Sentinels haue not the word that is kept in our camp, for the incõuenience that might hap, if being takẽ by the enemy, & corrupted with rewards or otherwiſe, they thereby might know our word: but he ought to haue a differẽt conterſigne, that when he returnes, he may be knowne thereby.

The proper forlorne Sentinell, what it is.

An example.

The forlorne Sentinell, not to haue the word but a differẽt Conterſigne.

Gent. What order is obſerued in the day of the Word?

Capt. I haue already told you, that the Sergeant Maior doth take the ſame from the Generall, and giueth it vnto the Sergeants, and they vnto the Caporals and Sentinels: but with this conſideration, that the Sergeant Maior giue not the ſame vnto the Sergeants, being in Campania, vntill the very inſtant that they ſet the Sentinels and watch: And if they be in towne of garriſon, Citadell, or Fortreſſe

The order to be obſerued in the day of the word.

treſſe of defence, not vntill the ſhutting in of the gates, and the Sergeants & Caporals not to giue it vnto the Sentinels, vntill the very point of their placing at their *ſtandes* or *poſtes*.

Gent. You ſay here, that the Sẽtinels ſhould haue the Word; but I haue heard ſay, that among our Engliſh ſeruitours in the Low Countreis, the Word paſſeth no further then the Caporals; and the Sentinels not to haue the Word at all.

With ſome the word doth paſſe no further then the Caporals.

Capt. Indeede among raw ſouldiers there is good reaſon for the ſame, for the ſundry inconueniẽces that might otherwiſe follow thereon. But with the *Spaniſh Tercios*, where they be experimented men, aſwell in militarie actions, as in firme loyaltie to their king, this order hath bene obſerued, as I ſpeake of.

Dangerous to truſt the word with raw ſouldiers.

Gent. Then the Caporall hauing the Word, and the Sentinell, not: what is the Sentinell to do, when occaſion is to demaund the Word?

Capt. The Sentinell finding any occaſion, is to cauſe the partie to ſtand, and preſently with an audible voyce to call his Caporall; who with ſpeede, from the Corps de guard, repaireth to the Sẽtinels poſt, & there himſelf taketh the Word.

The Sentinell not having the word, what to do.

Gent. What order is obſerued among the officers and ſouldiers in taking the Word the one from the other? being a thing of ſuch importance, we would gladly know it.

Capt. When any Officer or Captaine of the Round, will, vpon any occaſion, draw neare vnto the Sentinell, the Sentinell, being a ſhot, ought to cock his burning match, hauing the peece charged and primed, and ſo to preſent it, and being a pike man to *Terciar* or charge his pike, and no farther off, then that with ſo low a voyce, as they may but vnderſtand one another, to demaund the Word, and in like order and conſideration ought the officer or Round to giue it vnto the Sẽtinell, when he commeth to viſite it; the which Sentinell, ought by no meanes to ſuffer any perſon to come neare vnto him, except he giue him firſt the Word, no although he knew him to be his Captaine or Sergeant Maior, or Camp-maiſter: for the ſouldier being ſet at the Sentinell is not bound to acknowledge any perſon, for to permit him to approch vnto him, but ſuch as ſhall giue him the Word which was giuen by the Generall, and ſo to the guardes, by the mouth of the Sergeant Maior: which is the meanes and inſtrument vſed in warres, to exclude all ſuſpectes, & decits: For we ſee, the ſight and hearing is eaſily deceiued, although it be by day, then how much more by night; as was well to be ſeene by *Publius Conſidius* one of *Cæſars* Captaines, a man eſteemed for valiant and skilfull (as one who had ſerued in the armies of *Lucius Sylla*, and *Marcus Craſſus*) whom *Cæſar* ſending to reknowledge and view the campe of the *Heluetians* his enemies, with certaine ſpies, & to ſee if *Titus Labienus* had gained & poſſeſſed a hill, whereunto *Cæſar* had ſent him, he miſſed & erred ſo much in the reknowledging thereof, that he came running vnto *Cæſar*, & told him, that the hil, which he had cõmanded *Titus Labienus* to gaine, was already poſſeſſed by the enemy, being quite the contrary; which cauſed that *Cæſar* failed to defeat the enemy that day. And therefore in caſes of ſuch importance, there ought great care and conſideration to be had.

The order to be obſerued in taking the word, by the officers, and ſouldiers the one from the other.
The ſhot; how?
The pike; in what manner?
The officer or Rounde; ought to giue the word vnto the Sentinell firſt.
The ſouldier ſet at Sentinell, not bound to reknowledge any perſon, without giuing the word.
The word is the meane in warre to exclude all deceipts.
The ſight and hearing, eaſily deceiued, eſpecially by night.
Example.
A fowle errour.

And againe the officer or Round, whẽ he goeth viſiting the poſt or Sentinels, if he find them ready & vigilant (being that which is expected) he hath no neede to approach alwayes vnto them, but to paſſe along and viſite the reſt: and if he finde them all with this watchfulneſſe & ready, let him returne to his Corps de guard.

The Round finding the Sentinell vigilãt, needs not alwayes approch neare him.

Gent. I haue heard ſay, that the Sentinell ought not to ſuffer any perſon to paſſe by without giuing him the word; and me thinks that you ſay, that the officer or Round, finding the Sentinell waking & vigilant, and hauing ſeene them, may returne to his Corps de guard without giuing the Word.

The Sentinell ought to ſuffer none to paſſe in or out of the campe without giuing the word.

Capt. The obligation and duty of the Sentinell is, not to permit any perſon to paſſe in or out from the campe, without giuing him firſt thè word, neither yet to come neare where he ſtandeth: but if thè officer or Round do paſſe through the Sentinels within diſtance of 8 or 10 paſes, it is ſufficient that hee ſpeake, and paſſe by, and is not bound to giue the Word. But if in caſe they were to come from out of the campe, he is in no wiſe to ſuffer them to come neare to reknowledge him, although it were at the abouesaid diſtance without giuing him the Word: and if happely ſuch perſon will not giue it, he may diſcharge at him, as at his enemy. And although he giue him the Word, he is not to permit him to enter freely into the campe, but to accompany him vnto the double Sentinels, & conſigne him vnto them, for that one of thē may forthwith, conuey him to the *Corpo de guardia*, and there deliuer him to the Sergeant, or Alferes, or to the Captaine of the companie, who are bound to giue preſent aduiſe thereof vnto the Sergeant Maior, vnto whom it concerneth to conuey him to the Camp-maiſter, or Generall, if the caſe ſo require.

The officer or Round.

Refuſing to giue the word, he may diſcharge as at an enemy.

How to deale with ſuch as come into the campe.

Whē the Alarme is giuen, what the Sētinels are to do.

Gent. When the Alarme is giuen, are all the Sentinels to retire to their Corps de guards.

Capt. No ſir; for they neuer ſhould forſake their poſtes without licence of their officer, and that they doe withdraw them, except thoſe which do giue the Alarme; who ſeeing ſo great a furie of the enemies to come vpon them, which they are not able to withſtand, that then indeede they ought to retire to their Corps de guards?

Whē the Alarme is giuē, what order is to be taken with the enſignes or companies.

Gent. In ſuch occaſions doe all the Enſignes, which are at the watch make a ſquadron together, or euery one apart?

The Generals guard, and guard of the munition, not to ſtirre.

To frame the ſquadrons with all diligence.

To enquire the cauſe of the Alarme.

To aduertiſe the Generall and Camp-maiſter thereof.

The cōpanies ſet in ſquadron not to diſſeuer without licence from the Generall.

To returne the Sentinels to their poſtes, or ſtations.

Capt. They all ioyne together in that Corps de guard, which ſtandeth moſt cōmodious for a place of armes, the which the Sergeant Maior ought to ſhew them before hand; whither alſo the reſt, which are in their quarters, ſhould repaire; but not thoſe which are guarde to the General, nor thoſe that do guard the munitiō, nor out of the place of armes, or at the guarde of the quarters, for thoſe are not to leaue their poſtes or ſtations; but of the others the Sergeant Maior ſhal frame his battell or ſquadron with all poſſible ſpeede & diligence: and then ſhall preſently enquire the cauſe of the Alarme, the which being knowne, he ſhall preſently by his officers, giue aduiſe vnto the Regiments next vnto him, and aboue all, he is to aduertiſe his Camp-maiſter and Generall; without order from whom, the companies already ſet in battell may not returne to their quarters and guardes. And ſo the Sergeant Maior, after they be fully ſatisfied & aſſured that they may disbād and breake vp, hee ought to demaund licence of the Generall for the ſame, and ſhall returne to ſet his poſtes as before they were. And if he ſhall perceiue it to be needfull to reenforce and ſtrengthen his guardes, he ought to do it with more or leſſe numbers, as the neceſſitie ſhall require it.

Gent. I haue heard that ſome Sergeant Maiors do draw out of their principall Corps de guards where their enſignes & companies do ſtand, & the firſt Sētinels,

other

other ſmall Corps de gards; but I know not to what end?

To draw out of the grand Corps de guard, other ſmall Corps de guards.

Capt. That Sergeant Maior doth not amiſſe: for that Corps de guard is of thoſe ſouldiers which are for the Sentinels, and Round that night; for that the officer, when he is to relieue and change them, may find them more ready. And theſe Corps de guardes do ſerue alſo, that the Sentinels may haue ſuccour neare at hand, if neede ſhould require: and againe, they helpe alſo to keepe the guardes more vigilant, and the ſouldiers more ready to the ſeruice of their enſignes.

The ſmall Corps de guard to what effect.

THE THIRD DIALOGVE.

Wherein is declared, ſome orders to be obſerued by the Sergeant Maior, in the very fact of armes: and in ſurpriſes and Camiſadas, and Ambuſcados: and to be a generall procurer of the ſouldiers good.

Gentleman.

WHat orders is the Sergeant Maior to obſerue, in the times of fight with the enemy?

Capt. The Sergeant Maior cannot keepe any certaine rule therein, conſidering the diuerſitie of chaunces, ſtratagems and policies, which in euery moment do happen in warre.

But in the action of battell, he is to ſee, and to foreſee (as before I ſayd) as well their owne, as their enemies orders, and diſorders; to redreſſe with all valour, readineſſe, and skill, what is needfull in his owne ſquadrons, and to eſpie euery aduantage vpon the enemy: and valiantly to animate, order and encourage his ſouldiers to valour, vertue and honour; and that with couragious and honourable words: and if by fortune any of his ſquadrons be diſordered and broken, he muſt with all ſpeedineſſe, courage, and skill redreſſe the ſame.

What the Sergeant Maior is to do in the fact of battell.

Gent. But if any men in the rankes of his ſquadrons be hurt or ſlaine, either by the enemies great ſhot, or otherwiſe, ſo that wanting there thoſe men which ſo are ſlaine or hurt, how are theſe rankes to be refurniſhed, ſo that it may be done without confuſion?

Capt. The order of the *Romanes*, as I haue already ſayd, was to fight in order of battallions, the one to ſecond the other, which is a very ſtrong order of fight, were men expert and skilfull therein: And the manner of the *Greekes* was in *Phalangia*; which is a iuſt ſquare of men, whom we do therein imitate: which manner of ſquare of men is, each man ſtanding conſequently in ranke, and in file one after other: ſo that if any of the firſt files or rankes be ſlaine or hurt, the next ſoldier ſucceeding the ſame man hurt or ſlaine, is to ſtep vp into his place & roome, and the next after to follow him; and ſo ſucceſſiuely one to follow another, euen vnto the center or traine of the ſquadron: in ſuch ſort that alwayes the formoſt rankes be fully furniſhed.

The Romaines order was to fight in battallions.
The Greekes did fight in Phalangis, or ſquare.
Men ſlaine or hurt in the firſt rankes, how to reforme the rankes.
The fore rankes to be alwayes kept full.

Gent. And what is to be done with thoſe hurt and ſlaine men, for me thinkes they ſhould be looked vnto.

Capt. The Spaniardes haue a laudable cuſtome, which is, that they haue certaine men appointed of purpoſe, to retract and draw foorth of the ſquadrons, ſuch men as be hurt, and to bring them vnto the chirurgians: and for ſuch as bee

officers appointed to withdraw hurt and ſlaine men out of the battell.

ſlaine right out, to conuay them away, ſo that their ſlaine numbers is neuer light-ly knowne to the enemy. Which order I would wiſh to be receiued and obſerued amongſt vs.

Gent. What other parts are there yet in him to be required?

To be skilfull in giuing a Camiſada.
Example.
To conduct the ſouldiers with great ſilence vnto the Camiſada.
To inueſt their ſhirtes.
To performe with reſolution, and all celerity.
In ſuch difficult attempts the Sergeant Maior to be conductor.
Example.
In Ambuſcados the ſouldiers to be ſilent and ready.
To charge ſuddenly.
The Sergeant Maior to be ſolicitous with the generall for armour, and other neceſſaries for his regiment.
How the ſame to be reparted.
To be the vniuerſall procurer of the ſouldiers good.
Hurt or ſicke men to be conueyed to the hoſpitals.
All vnder officers to aſſiſt the Sergeant Maior.
The carriage-maiſters.
The Harbingers.
The Sergeants.
Lieutenant and Alferes.
Drumme Maior.
Caporals of the field.
The Sergeant Maiors Coadiutors.

Capt. Moreouer the Sergeant Maior ought to be very expert, and to be very skilfull, and well aduiſed, in the courſe which is to be kept in giuing a *camiſada*: as that was, which was giuen vnto the Prince of *Oranges* army by the Spaniards, when he came to relieue graue *Lodwike* his brother, being beſieged within *Mouns* in *Henault*, by Duke *d'Alua*, which was ſuch, that he was faine to raiſe his campe, and retire toward *Germany*. Now in ſuch caſes, the Sergeant Maior muſt conduct his ſouldiers with great ſilence, euen to the place of the enemies campe, and there ſhall he commaund them to put their ſhirtes vpon their armour, at one inſtant making ready to effect their deſſeignes, whereunto they ſhall paſſe with all ſpeede and reſolution, before that the enemy may be aduertized thereof by their Sentinels. And alſo when other great occaſions are offered, where it is needefull to carry the ſouldiers with great ſilence, ſecrecie, and ſtilneſſe, he is to be their guide; as did the Sergeant Maior *Valleio*, when *Mondragon* with his regiment paſſed ouer the riuer *Schalt*, to ſuccour their friends beſieges in *Targoes*.

And in *Ambuſcados*, which are to be done in places of couert; as woods, thickets, hollow wayes, or hils, he is to be carefull that the ſouldiers be ſilent and without noiſe, for not to be diſcouered, vntill their eſpials and watches, appointed for that purpoſe, doe giue them the ſigne of the conuenient time of their ſodaine charge vpon the enemy.

Alſo it is the Sergeant Maiors part to be ſollicitous and diligent with the prince or Captaine Generall of the army, and the other ſuperiour officers, for the prouiding of armour, and other neceſſaries for the companies of his regiment, and for the other munitions of powder, match, lead, and victuals: the which he ſhal cauſe to be reparted vnto the Sergeants of the bands, to be by them deliuered vnto the Caporals, who are to diſtribute the ſame among the companies.

And to conclude, he ought to be the vniuerſall procurer of the ſouldiers good, procuring their payes, and that they be ſuccoured in their neceſſities and wants. And if there be any hurt men or ſicke, hee is to procure that they may be caried with all care, vnto the hoſpitals or ſuch places deputed for the ſame, prouiding them of cariages, neceſſaries, and guides if neede require. To do all the which he hath all the officers of the regiment for helpers and miniſters; which are to aſſiſt and obey him, For the cariage-maiſter is to furniſh him with cartes, and cariages as ſhall be needefull, and the furrier maior, to prouide and bring munition at the day of battell: and the Sergeants to aſſiſt him, to ſet the ſquadrons and to keepe the companies in order and array: and the enſignes and Lieutenants to giue and notifie the orders and commandes to the gards for the ſeruice of the companies: and the drumme maior to proclaime and ſound the generall commandes, bandos, and lawes of the field, and to giue warning vnto the Captaines, and companies, which are to haue the watch: and the Caporals of the field, being his *Coadiutors*, to aſſiſt and helpe him in all matters, and actions generall touching his office, with whom he is to conſult, and communicate his proper authority vnto the beſt experimented of them (with leaue of his ſuperiour commanders)

ders) and vnto which Coadiutor the Captaines and officers ought to be obedient, as vnto the Sergeant Maior him selfe, receiuing also from him their order and commaundes: and therefore it behoueth that he be a verie sufficient person, of good deserts, and knowen to bee such; to the ende, that the respect which is borne to him for his office sake, be not lost, if the partes requisite in such a personage be not found in him. It toucheth not onely the Sergeant Maior to be a generall maister of all Militarie discipline, and the vniuersall procurer of all necessarie things for the souldiers bodies (as I haue sayd) but he is also precisely bound to be the procurer of their soules health, by punishing and banishing all publike crimes and sinnes out of euerie Band and Companie, as leud keepers of common women, theeues, pilferers, disordered persons, and drunkardes, bawdes and brawlers, and all such as liue infamously, and aboue all to be verie carefull not to suffer anie blasphemer, yea, if it were possible, not to haue anie swearing by the name of God, sith that with all these sinnes the diuine Maiestie is highly offended: which if herein he haue the care that is required, he shall not faile to be well reputed, fauoured and esteemed of the Prince, vnder whose ensignes he warreth, and also bee blessed of God, both in heauen and earth.

The Sergeant Maiors Coadiutor.

The Sergeant Maior a generall maister of all militarie discipline.

A procurer of the souldiers soules health in generall.

Banishing all publike crimes, and common offenders.

The reward of a good officer, both in heauen and earth.

THE FOWERTH DIALOGVE.

Wherein is treated of the office, dutie and partes of a Sergeant Maior, entring with his regiment into a fortresse or towne of garrison, to keepe the same: and the orders therein to be obserued, both of officers and souldiers.

Gentleman.

GOod Captaine, you haue verie well and largely declared the office, parts and duties of a Sergeant Maior, lying in the field and Campe; wherefore I pray let vs now intreate you to shew the parts of his office entring with his regiment into a fortresse or towne of garrison, to defend and keepe the same.

Capt. Hauing found you so kind and curteous (Gentlemen) I can do no lesse but endeuour my selfe to content you in what I may: and therfore I say, that when anie regiment doth enter into anie fortresse, towne, or castell, to reside there for the defence thereof, the Sergeant Maior is presently to reknowledge and viewe euery part of the same, both within and without, and to consider the parts most necessarie where to place the Corps de guards, and to set the Sentinels: and also to marke the most conuenientest places for the Rounds to passe, and to see the place or places of assembly or Armes, whereunto the Captaines and Companies are to gather and assemble, if in case anie alarmes be giuen: and this being done, he is presently to deuide the Companies according as he shall see it most conuenient for the guard and custodie of the place. And of this repartition (communicating it first vnto his Colonell) he is to giue an order and instruction in writing, firmed with his hand vnto the Captaines and Ensignes of euerie Companie, reseruing a copy thereof himselfe, to the ende that no officer might with reason excuse himselfe, if hee should chance to commit any fault or negligence in any

The Sergeant Maior entring with his regimēt into any Fort or towne of strength to keepe the same, what he is to do.

1. To reknowledge the place well.

2. The places necessarie for the Corps de guards, Sentinels, and Rounds.

3. The place of assembly.

To deuide the cōpanies, and the orders to be obserued he must giue in writing vnto euery Captaine.

thing touching the guard of that which was commaunded him, ſeeing it was deliuered him in writing.

Great care to bee had in deuiding the guardes.

And becauſe there is great conſideration and care to bee had in deuiding the guardes of a Fort, Hould, and Towne of defence, chiefly if any enemy army be expected to the ſame, notwithſtanding that in all other times this care and foreſight is to beobſerued in this function: he ſhould in no caſe aſſigne vnto euery company the part of the wall or bulwarke which they are ordinarily to keepe: for the moſt often that townes haue beene taken by practize, *tracto*, or treaſon, the principall cauſe hath beene, that the Sentinell or officer, which ſo ſelleth the place, hath knowne the part and quarter where ordinarily hee was to guard and watch, whereof wee haue many examples: and therefore hee ought to aſſemble, and gather into the place euery euening, the companies which are to bee that night of the watch, and that they draw lots, or caſt the dice for the quarters which ſhall concerne them to keepe: and the troupes or ſquadraes, and Sentinels ſhall obſerue the ſame order: in ſuch ſort that neither any companie, may foreknow his quarter, nor yet the ſquadra, what part of the wall doth appertaine vnto them, vntill the very houre that the watches be ſet, and placed in the ſame.

No companie to haue any one place aſſigned them to kepe cuſtomably. The reaſons.

In the euening to aſſemble the companies of the watch.

To draw lots, or caſt dice for the quarters.

No companie nor ſquadras to know their quarter vntill the very houre of ſeting the watch.

Now this partition being made (as is ſayd) hee is to conſider very well, whether the Corps de guard, where the company or companies are to enter into and ſtand, be fit and commodious; and alſo thoſe of the gates and caualleros. And if they haue neede of repairing, let him cauſe it foorthwith to be done, and alſo the garrits and watch houſes, where the poſts and Sentinels are to be placed, and whether they bee ſufficient to defend and keepe out the raine: and this to be done at the charge of the city or towne, as is accuſtomed. And if the Rounds cannot commodiouſly paſſe round about the wals, he is to cauſe it to be accommodated foorthwith. And muſt ſee, that there be ſufficient ſtore of torches, creſſets, linkes, and lanthornes, as well to be kept in the Corps de guard, as for the roundes and counter roundes. In placing the companies which are to haue the watch, the Sergeant Maiors do vſe different orders; for ſome do ſet them in the morning, and others in the euening; ſooner, or later, as they ſhall thinke good. But in mine opinion, if neceſſitie did not otherwiſe conſtraine, I would alwayes ſet them (eſpecially in ſommer time) an houre before the ſunne ſetting, as well for that the ſouldier ſhould come ſupped, and ſo ſhould haue no occaſion therefore to go out of the watch, as for that vntill the ſhutting in of the gates, no ſoldier ſhould be permitted to diſarme himſelfe, giuing them to vnderſtand how foule it is, and ill beſeeming the profeſſion of a ſouldier, that no ſooner they are entred into the Corps de guard, but that their Corſlets be hanged vp vpon the wals: yea and ſome doe vſe it in the Campe, hauing the enemies army at hand, the which fault is intollerable, and they ought not to do it, vntill they ſee their Alferes diſarmed firſt, on whom they ought to fixe their eyes, to imitate, as they do on their enſignes in the field, to follow.

Reparations to be done.

Garrits, and watch houſes.

The walkes for the Roundes to be made commodious.

To prouide ſtore of torches and lights for the night.

To ſet the watch an houre before night.

No ſouldier ſuffered to diſarme himſelfe vntill the ſhutting in of the gates.

The ſouldiers not to diſarme vntil the Alferes be vnarmed.

The orders to be obſerued at the opening of the gates.

At the opening of the Gates, the Sergeant Maior ought to appoint the Sergeāt or Sergeants, that be of the gard, that they be preſent at the ſhutting & opening of the ſame, and the ſouldiers alwayes to betake them to their armes, not ſuffering anie to carrie cloake, mantle or ſuch like thing, to trouble them at that inſtant,

ſtant, and that there firſt paſſe foorth at the wicket (which ſerueth for that purpoſe) fiue or ſixe ſouldiers, who ſhall diſcouer, take knowledge, and viewe, ſeuentie or eightie paſes out abroad into the fields: and finding all things ſafe and ſecure, the gates ſhall be opened, firſt ſuffering the in-people to paſſe foorth, and that not by throngs, as commonly is vſed, but by litle and litle orderly; eſpecially if there be cariages, cartes, or baggage: and vntill all thoſe be paſſed out, he ſhall ſuffer none to enter in, neither permit them to approch nigh vnto the gates. And the iſſuing out of the people being ended, with the like regard and order ought the out-people to enter; alwayes hauing in the Corps de guard of the gate, both by day and night, two Sentinels, one at the weapons, and the other in the field; and that euerie one of theſe ſhould haue a *Spontone*, or a long ſharpe iron, to the end, that when any waine, wagon, or cart, laden with hay or ſuch like, doe paſſe by, he may therewith thruſt the ſame thorough, to know if there be any deceipt therein hidden. For a Garriſon may eaſily be deceiued by ſuch guiles and ſtratagemes. Like as *Cæſar de Napolie* did attempt at Turine, although he effected it not, being preuented by the aduiſe and diligence of a Smith, an inhabiter of that place.

Not ſuffering the people to paſſe out or in by throngs.

The Sentinell to haue a Spontone.

Example of a practiſe.

He is to cauſe wood to be prouided for all the guardes, although that cold weather conſtraine it not, for that to light their matches it is alwayes needfull to haue fire. And that in the Corps de guard there be place commodious to hang vp their Corſlets, and to accommodate their peeces in good order: ſeeing not onely that it is neceſſarie, that the ſouldiers may with ſpeede and readineſſe betake them to their Armes, if in caſe the Alarme be ſtriken, but alſo to auoyd all confuſion, and alſo for the adorning of the Corps de guard.

To prouide wood for the corps de guard.

Places to be prouided in the corps de guard to accõmodate the armes

And when the Enſignes or companies ſhall enter for guard or watch into the place, the Sergeant Maior is to be preſent, and he ought not to ſuffer then anie gaming Tables; but the ſouldiers to receiue in their Colours with great reſpect and reuerence, ſith they repreſent the authoritie Royall: and in doing the contrarie, it repugneth all good Militarie diſcipline. And he is to keepe a good account and reckening with the ſouldiers that ſerue in euerie Companie, according to the muſter that they made, whereof he is to haue *fede* and certificate from the Pay-maiſter or Treaſurer, and knowing thereby, that they bring to the guard and watch, much leſſer number of people then they receiue pay for, he ought to take a reckening of the officers of the Companies, and for being careleſſe herein, manie ſouldiers do ſerue manie times but badly. And he ought not to ſuffer, that in their entring in or going out from the watch, there want anie peece of their Corſlets, or Morian to the ſhot, neither that they ſerue with ruſtie armour, nor of the antique faſhion; neither that anie Pike do want his head, cheekes, or arming; for that in hauing them, it doth not onely beautifie the ſquadron, but it maketh it to ſeeme more then it is, which is a circumſtance of great importance, ſith all the apparitions which may yeeld terror to the enemie, are to be eſteemed, and much accounted of.

Not to ſuffer any gaming tables the watch entring into the place.

To receiue their colors with great reſpect and reuerence.

To keepe good account of the number of the ſoldiers.

To haue regard that their Armes be complete and good, and in conuenient order.

All apparitions yeelding terror to the enemy, to be eſteemed.

Gent. In what order do the Enſignes enter into the place?

Capt. Vnto the Corps de guard, the ſhot goeth alwayes in the Vantgard, and there arriuing, do open, making a lane or ſtreete, betwixt the which the Pikes do enter, and march in their Arrayes: and (in mine opinion) they ſhould not

The orders to be obſerued by the companies entring into the Corps de guard.

Another order set downe in folio 46.

carrie them aduanced vp, as I haue many times ſeene vſed, but they ſhould paſſe in betwixt the ſhot, with their pikes on their ſhoulders, marching as they come; and at their ariuing, vnto the head of the ſhot where the Captaine ſtandeth, without opening or diſaraying, and then aduance their pikes, abiding in their rankes, and ſo from hand to hand, each ranke to do the like: and then the ſhot at that arriuing and rearing of their pikes, ſhall draw neare and empale the firſt rankes on each ſide, and ſo conſequently the reſt, vnto the end of this order; in ſuch ſort that the ſquadron may remaine formed and garniſhed. And if by chance two companies do come at once into the place, as many times it chanceth, then ought they ioyntly to forme the ſquadron, with their ſhot on each flanke, and the corſlets not to breake their arrayes, aduertiſing that alwayes the enſignes be in the center thereof.

Two companies entring at once into the Corps de guard.

Gent. And the companies which ſtand at the ward, what are they to do when the others do enter?

Capt. They muſt attend ready armed and armes in hand, ſtanding vpon one ſide of the Corps de guard, vntill that thoſe companies which do enter, haue finiſhed their ſquadron; and then do they march in order towards their lodging, accompanying firſt their Coulours home.

The companies which were at the watch, what to doe.

And the Sergeant Maior is to bee carefull, to viſite euery day the Corps de guards, whereby he ſhall cauſe, that neither the ſouldiers nor officers do abſent themſelues from their watch, and that there be no brawles nor brables therein. And it doth import much, that hee doe the like in the Roundes and counter Roundes.

The Sergeant Maior is to viſite the Corps de guard.

And if any ſhould diſmeanor himſelfe, breeding queſtion or braule, either in word or deede, he is ſeuerely to be puniſhed, for the great inconueniences that may enſue thereupon, being ſo many men together with weapon in hand.

Vnruly ſouldiers to be puniſhed.

And he is to prouide that the Roundes and counter Roundes be of more or leſſe men, or more or leſſe continued, according as neede ſhall require: but they neuer ſhould returne to their Colours from whence they departed, vntill they haue furniſhed their quarter, the which they ought to beſtow and ſpend in giuing turnes about the wals, & veiwing the vigilance and carefulneſſe of the Sentinels: and the like ought thoſe to doe, which doe goe their Roundes in the towne.

The Roundes and counter Roundes.

Their duties and charge.

Gent. When the Roundes and counter Roundes do meete, as well in the campe as in a Caſtle,, who is to giue the Word one to the other firſt?

Capt. The counter Roundes are moſt commonly of officers, and therefore by reaſon and dutie the Round is to giue place, and to giue the Word firſt vnto the counter Round. But for as much as Captaines themſelues do vſe to round in the ordenary quarters, it is conuenient, to the end that none may iuſtly be agrieued, and to disbarre all oddes and inconueniences, that the Sergeant Maior (as a perſon, vnto whoſe charge and office is the diſpoſing and appointing of the guards, Roundes, and counter Roundes) do giue order vnto the companies in what manner they are to behaue themſelues in this particular point: which ſhall be, that alwayes the Round to giue place, and giue the Word vnto the counter Round: and thence foorth ſhall appoint the counter Roundes to be of officers of the

The Round is to giue the Word firſt vnto the counter Round.

The Sergeant Maior is to giue order for this point.

the companies, as is accuſtomed.

And in caſe that in the one and the other there be officers, or that both be of ſouldiers, it is great reaſon that the Round do yeelde and giue the Word firſt, for that the counter Rounds be of more preheminence: the which are not only ordained to do the ſame which do the Roundes: which is to ſee vnto the care and vigilancie of the guardes and Sentinels, but they are alſo ordained to ſee if the Roundes do faile in their duties: But this is to be vnderſtood in caſe that the *ſupra* Roundes be as ordenary as the Roundes: for that when the Colonell or Gouernour of the fort, or the Sergeant Maior doe extraordinarily viſite and Round, as they are wont to doe, then is it their part to giue the Word vnto the Round: the which being not aduertiſed that they be any *ſupra* Round, he is bound to giue the Word vnto none but only vnto the Sentinell: and all thoſe which he ſhall meete, he ought to view, and take account of them, of that which they doe, and whither they go; apprehending ſuch as he ſhall find faulty, or any other ſuſpected perſon that he ſhall fortune to meete. And if by chaunce there paſſe any body by night out of the fort or garriſon, as commonly it happeneth, it is needefull to aduertiſe the Sergeant Maior thereof, who ſhould thereupon take order to change the Word which the watch had, for the inconuenience that might happen for not doing the ſame.

The counter Rounds duty and charge.

The Gouernour and Sergeant Maior rounding extraordinarily is to giue the word firſt vnto the Round.

The Round is to giue the word firſt vnto the Sentinell, and to take account of ſuch as they ſhall meete.

If any paſſe out of the foreſt by night, to giue aduertiſment thereof.

Gent. And the guardes by day, may they retire without farther order?

Capt. No truly, vntill the Sergeant Maior, or his *Coadiutor*, do come to withdraw them in ſuch manner as they were ſet, placing the guardes that are to remaine there by day. And for as much as I haue ſpoken very much touching this officer, I will conclude with ſaying, that he ought to viſite and reuiſite at diuerſe and different houres, all things that he hath prouided, after their well ordering; and ſee how they be performed, reprehending and puniſhing what he ſhall find worthy puniſhment. But he ought to do this in good and curteous ſort, and ſober manner, knowing how to commaund with ſweete and gentle words, hauing a naturall grace thereunto, and grauity, whereby to be obeyed, in ſuch ſort, that when hee would determine to execute his deſſeignes, and his ſuperiours charges and commandes, all the ſouldiers and officers might beare him that due reſpect and obedience, which ſhould bee needefull to bring the ſame to effect. Finally, let the Sergeant Maior be very carefull to prouide good drummers, and men skilfull in their art, eſpecially their Drumme Maiors; for the drumme is the voice of the commander in the field: and beſides their skill with the drumme, to be men of good capacity and iudgement; alſo to ſpeake ſundry languages, being behouefull for many important occaſions wherein they are to be emploied.

The guard not to retire by day till an officer come to remoue them.

To viſit and reviſit all things often and at different houres.

To reprehend with grauity and curteous ſpeeches.

The drumme is the voice of the commander.

To prouide good Drummers.

Gent. Captaine, you haue throughly diſcourſed touching the office of a Sergeant Maior; whereby is to be vnderſtood how many great and good parts ought to be in the perſonage called to this martiall function. Now I pray tell what degree of office commeth next.

Many good parts ought to be in the perſonage of a Sergeant Maior.

THE FIRST DIALOGVE.

Wherein is declared the Election, Office, parts and duties of a Camp maister or Colonell, and from whence these names Colonell, and Camp-maister did spring, with some discourse touching the nature of the Spaniardes.

The Camp-maister or Colonell, his Election and Office.

Gentlemen.

THe next officer, in superiour degree, is the Camp-maister or Colonell. The election of this officer is made by the Prince, with the aduise of his Councell of state and warre. His office is, to be Commaunder and Chiefteine ouer the Captaines, and all the other officers of his *Tertio* or Regiment: hauing iurisdiction & dominion ouer them all. Whereby may be inferred and gathered the partes and qualities which ought to be in him, and the great skill and experience in warre; as one who ought to exceede them all, for to know how to commaunde, rule, and gouerne them, with authoritie, prudence and valour. And for as much as in many occurrants and occasions, growing and presented in warres, he ought to know how to performe the parts and office of a Lord high Generall, being alone with the companies of his owne Regiment, as when his Generall commaundeth him to the batterie, or siege of any fort or Citie, or to defend any towne or fortresse, or to warre in open *Campania*, to giue battell to the enemie, to make incursions, to retire and withdraw skirmishers, to frame bridges ouer riuers, to fortifie himselfe in campe, to conduct artillerie, and many other peeces of seruice to be performed with a band of three or foure thousand men: whereof there are many rare examples, extant of many braue Colonels, who haue shewed themselues singular herein, both *English*, *French*, and *Spanish*, in our late and moderne warres, brauely behauing themselues, as did *Lucius Martius*, a *Romane* Knight, when hee gathered together the relictes of the defeated armies of the two *Scipios*, hauing had those their two Consuls slaine by *Asdruball* the *Carthagian* in a campall battell. Therefore, I say, for as much as by that which is already spoken, may be vnderstood, that he, which is a Campe-maister should be endued and graced with the like good partes and skill, for to conduct, fight, and gouerne well, as a Captaine Generall, I will leaue to recite now, vntill I come to declare the partes and qualities due to be found in a High Generall of an armie Royall; and from thence shall be considered what concerneth this officer, and so will I, at this present, speake onely of such things as hee ought to prouide for the good conduction and gouernement of the companies of his Regiment.

The Colonell his office and Commaunde is ouer the Captaines and soul diers of his regiment.

Principall partes in a Colonell.

Exãple of braue Colonels Lucius Martius.

The two Scipios slaine.

Asdruball the Carthagian.

To conduct, to fight and gouerne well.

In the time of the Emperour *Charles* the fift, *Frauncis* the French king, and *Henrie* the eight, king of England, those were intituled *Colonels*, or, as some will, *Coronels*, which the *Spaniardes* do call *Maesters de Campo*: being yet called *Colonels*, by the *Italians*, the *French*, the *Germaines*, and by vs Englishmen, so called: by the *Spaniardes*, *Maestres de Campo*, for hauing, quited and depriued them the preheminence which they had to elect Captaines and Sergeant Maiors, the Lord high

Colonels with vs, which the Spaniyardes do call Maestres de Cãpo, and wherefore so called.

high Generals reſeruing the ſame vnto themſelues, leauing vnto them no more but the commaunde, and authoritie in the adminiſtration of iuſtice, and in the effectes of warre. For commonly the Captainries are appointed by the Prince or Generall: the Colonell electing vnto himſelfe a moſt ſufficient Lieutenant and Alferes, a Sergeant, and Caporals, all men of due ſufficiencie, to the ende that his Captaines may imitate him therein; for that, that it importeth much to haue good and skilfull officers, ſith from them doth grow the obſeruing of good orders, and vnto the armie the due vſe and exerciſe of armes, with the perfection of diſcipline, and all good partes to the perfection of infanterie, with incouragement to the ſouldiers, that with them the Colonell may attaine honor, glory, and fame by his actions, and militarie courſes.

The Colonell electh to himſelfe a Leutenant, and Alferes, a Sergeant, and Caporals.

Frō good & skilful officers, enſueth the obſeruing of good orders.

Gent. Thus it ſeemeth that this name of Camp-maiſter is but moderne.

Capt. True; Neither the name of Colonell very auncient.

The name of Colonell or Camp-maiſter, but moderne.

Gent. Then, how were thoſe called before time, which had the gouernement of ſouldiers in armies?

Capt. They were called *Duces* (guides) of which amongſt the *Romanes* there were three ſortes, or differences *viz. Duces Militares*, *Duces Prouinciales*, and *Duces Limitanei*; intituling thoſe, *Duces Militares*, which went ordinarily with the armies: hauing each, vnder their charge and rule, one thouſand men or more, as haue now our Cāp-maiſters or Colonels, or rather our Generals. The other, intituled *Duces Prouinciales*, were thoſe which had all the ſouldiers of one Prouince, vnder their commaund and charge; as haue the Camp-maiſters of the *Tertios* of *Naples*, *Sicilia*, & *Lombardie*. The third, called *Duces Limitanei*, were thoſe which had vnder their charge and gouernement, all the men of warre on the frontiers to the enemies, as had our Lord Marchers in England.

By the Romans called Duces, differenced into 3. parts.

1. Duces Militares.

2. Duces Prouinciales.

3. Duces Limitanei.

Gent. Thus the titles of Dukes ſprong firſt from the warres.

Capt. So did the titles of Earles, Marquiſes and Knights. But now to returne to our matter. The Colonels companie or bande, doth preceede all the other companies of his Regiment, both in place and in all other occaſions. And now for to know how to commaund and gouerne all the officers of his band, and of all the other cōpanies in his regiment, he ought moſt perfectly to vnderſtand that which toucheth euery particular officer, euen from the *Capo de ſquadra*, vnto the Sergeant Maior: and it would bee a matter of great importance, to haue exerciſed, and to haue riſen vp through all theſe offices, the better how to know, and perfectionate his owne: for by knowing this, the Captaine, the Sergeant Maior and all the reſt, will walke more warily, and paſſe more punctually in the accompliſhing of all their charges and duties, knowing that they haue a commaunder ſo skilfull, which quickly will perceiue, either their vertues or vices: perſwading them to the one, & diſſwading thē from the other: the which in actions of warre do either greatly helpe, or greatly hinder.

The titles of Dukes, Earles, Marquiſes, and Knights, ſprang from the warres.

The Colonels cō-panie preceedeth all others of his regiment.

The Coronell ought to be a perfect ſouldier.

Being ſuch, the other officers will more punctuallie performe their dutie.

In the *ſquadra* which belongeth to himſelfe, out of his owne companie there ought to bee ſouldiers of great experience and valour, which ſhould be aduantaged in their payes, and whom he muſt eſteeme and make great account of, conſulting often with them, & with his Captaines & officers of beſt cariage, & moſt experience in his companies: For many times a priuate ſouldier of experience and iudgement, will giue better reaſons, counſell and aduiſe, then many other of

The ſquadra of the Colonels band ought to be ſouldiers of experiēce and valour and be aduantaged in their payes.

To conſult with his officers, & old ſouldiers.

higher degree; which often hath bene proued, and examples extant.

To procure that all militarie discipline be duly obserued.

He ought to procure that all militarie discipline be duly obserued and that his Captaines, & the other officers vnder his charge, do obey, respect, & honor him, sith they are bound thereunto, as vnto the person of their proper Generall, in all things concerning the seruice of their Prince: and that the souldiers doe obey their Captaines & officers with great humilitie, & reknowledgement, and in like sort that the officers do commaund and gouerne them with cõuenient speeches, and good entertainement and curtesie. And it shall also much auaile him to know the names of his Captaines, Lieutenants, Alferes, Sergeants & Caporals, and of all the particular souldiers, if it were possible; for in the pinches of warre, it is to great effect, to call a Captaine, officer, or souldier by his proper name.

The duties of his officers and souldiers one to another.

To know readily the names of his Captaines and officers.

The Sergeant Maior is obliged (as I haue before declared) to receiue his orders & directions from his Colonell, and with his opinion and appointment, to augment or diminish the guards. But this to be vnderstood, when there is no Camp-maister Generall in the armie, whose proper office this is, whom he ought to respect and obey, and to accomplish all orders by him appointed, touching his charge.

The Camp-maister generall with vnto the Lord high Marshall, his preheminence in field.

In the administratiõ of iustice, he is to gouerne with great discretiõ & wisdome, executing it with all equitie and right, that his souldiers thereby may both loue him & feare him; for it cõcerneth the Maister of the Campe, to apprehẽde, to discharge, & to punish, & also of life & death, in all delicts & cases deseruing such punishments; and in things and matters committed against the commaunds, lawes, and bandos of the high Generall of the infanterie; and in whose absence he may cõmaund orders & make lawes, and punish those that go against them, and obey them not; For, for the execution of iustice he hath his appointed officers, with their payes for the same; and also he doth iudge and determine their ciuill differences & debates, which shall arise among the officers and souldiers of his regiment. And if any do find themselues aggrieued with his sentences, they may appeale vnto the Lord high Generall or Camp-maister Generall, that being vniust, they may reuoke them; and if not, then commaund them tõ be executed. And in all these matters touching the administration of iustice, if the Colonell generall, or Lord high Marshall (being there any such) wil intermeddle therin, he may; and, as superior and preheminent in office, he may commaund, ordaine, do, and vndo; diminish or augment the authoritie and preheminence vnto the Colonell.

In the administration of iustice to gouerne with all equitie and right.

Parts of his office.

Appellatiõs to be made to the high Generall.

It concerneth him also to haue regard to the place of victuals or market, that there be no deceipt vsed against the souldiers; & he is to set the price, waight, & measure of all that is sold, & to put good guardes to see that the marchants & victuallers may keepe their stuffe and wares in securitie and safe; and for the same, do the marchants and victuallers pay euery Saterday, for euery staule or booth, some six pence a peece or more; all this, being with his regiment alone, where there is no Camp-maister Generall; vnto whose office this doth properly appertaine. He is to be carefull and diligent with the Lord high Generall for his souldiers payes: and see they be prouided of armour, necessaries and needfull munitions, and the same to be distributed, as before I haue set downe: and this he is to do with such earnest diligence and affection, that he may oblige them all to acknowledge and confesse him for their true father, and faithfull Commaunder.

His charge ouer the victuallers or victuals.

To be carefull for the souldiers payes.

Among

Among the *Spanish* cõpanies in *Italy*, it is accuſtomed that no Captaine do entertaine any ſouldier into his band, but that the *Maeſtre de Campo* do firſt ſee and approue him, eſpecially of a ſtraunge nation, being not a particular and well knowne perſonage; for many inconueniences, that may follow thereon.

To be made acquainted with all new ſouldiers entertained into any bande.

Gent. But I haue heard ſay, that the *Spaniard* permitteth none of a ſtrange nation; though of neuer ſo good parts and ſeruice, to aſcend vnto any degree of office among them: which is contrary to vs: for our Princes, in time paſt, haue receiued, eſteemed, and aduaunced, many ſtraungers, being perſonages of vertue, valour, and deſert.

The Spaniards will not permit any ſouldier of a ſtraunger nation to beare office among them.

Capt. So did the *Spaniardes* in time paſt, in the times of their kings of *Caſtillia* and *Aragon*, in their ſharpe warres amongſt themſelues, and againſt the *Moores*, wherein many of our nation did ſingular themſelues, & from whom are deſcended many of the chiefe houſes of *Spaine*. But ſince their wonderfull diſcouerie of the *Indias*, by *Columba* an *Italian*; their maruellous conqueſtes therein; their ineſtimable treaſures, long ſince brought home, and continually receiued from thẽce; their long cõtinuance in warres, being nuzzelled therein by *Charles* the fift; the braue Prouinces of *Italie* and *Flanders* by him annexed vnto their crown; with ſundry ſuch fauours of fortune, hath inflamed them with ſuch imperious minds, & poſſeſt them with ſuch proude and high conceipts, with ſuch iealouſie of their honours, as they terme it; and inueſted them with ſuch an habite of ſcorne and pride, that it is a wonder if they permit any honorable Gentleman of a ſtraunge nation, though endued with neuer ſo many good parts, and ſerued them neuer ſo well; to aſcend vnto any high degree of commaund amongſt them, their enuie is ſuch. For let vs but throughly marke & conſider the actions of the braue Prince of *Parma*, done in their ſeruice, yet by them enuied, obſcured, and ſlaundered what they may, and you may eaſily perceiue the veritie hereof. But what will be the end of their ambition and pride I know not. It may be that God ſuffereth thẽ, for the ſinnes of ſome nations, as by *Flaunders* and *France* may appeare, and alſo by their attempts againſt vs. But who can tell, whether the Lord vſing them for a miniſter, as the louing father doth the rod, to correct his beloued children; who, after correction or amendement, caſteth the rod into the fire. God graunt vs the ſpirite of true repentance, the which if we haue, we litle neede to feare the ſmart of this odious rod. Yet this much I ſay againe for the *Spaniard*, that any braue Gentleman, ſeruing valiantly amongſt them, in place of a priuate ſouldier, ſhall be eſteemed, beloued, and fauoured of them, ſo he aſpire not to commaund: a great ſigne of ingratefull mindes: for who knoweth not, that euery braue man of warre beareth a tatch of ambition, and of aſpiring minde, deeming their vertue valour, and ſeruice to deſerue degree of charge: a thing not to be miſliked, in mine opinion, ſo it be procured by lawfull and honeſt meanes. But enuy & fearefull iealouſie, is now ouer rife in the world, raigning commonly amongſt men, not of the beſt deſerts, fearing a companion with them in office.

The Spaniardes pride & ambitiõ grew principally ſince the diſcouerie of the Indies.

Fauours of fortune.

Their enuie to the Prince of Parma.

God may ſuffer them for the ſins of ſome nations.

A good conſideration.

Euery braue mã of warre beareth a tatch of ambition.

Enuie and fearefull iealouſie euer rife in the world.

Gent. Me thinkes, you haue ſhewed vs the proud *Spaniardes Mappa Mundi*; wherefore it were good for vs to croſſelyne him what we may.

The proud Spaniardes Mappa Mundi to be Croſſed.

Capt. Proud *Spaniard* indeede, and ambitious alſo; his minde neuer reſting like *Siziphus* rowling ſtone. But it was not ſo, two or three hundred yeares agone: for then were they poore, and contented to liue quietly with their neighbours,

Pouertie breeds humilitie; humilitie breeds credit; credit breeds aduauncement, aduauncement brings wealth; wealth breeds pride; pride sprouts ambition; ambition begets enuie; enuie broacheth warres; warres brings pouertie; pouertie brings peace.

and glad of their good wils, for pouertie made them humble; their humilitie brought them fauour and credit, credite wrought their aduauncement; aduauncement heapt by fortune, brought wealth; wealth bred their pride; their pride sprouted ambition; their ambition begat enuie; and their enuie engendred warres; warres may breed pouertie, and pouertie breedeth peace. Hereupon will I reporte you certaine speeches passed betwixt my selfe, and a young *Biscain Spaniard*, of whom I had the examinatiō, with others his companions, not long since, at *Laugharns*, a sea coast towne in Southwales. After hauing answered vnto such points and interrogatories, as were vnto him propounded in presence of the Lieutenant of that Shire and other Gentlemen, I demaunded of him againe touching his kings *Armadas*, and preparation for warres. Captaine (saith he) our king hath ships but vnwilling mariners, his preparation of the last Summer is now dissolued: his home bound *Indies* fleet being safely arriued; and his out bound sent away; After this safe arriuall of this his *Indian* fleet, bringing the sinew of his warres, what he will do, I know not, & euery spring there is speeches of warre; but I perceiue small performance and effecting; and but bad successe yet, especially against your nation. But how soeuer the game goeth, we, the poore do smart, and I wish the ill yeare to his Eggars and setters on; the Pope, his Clergie, and some his warre Commaunders; who, the warres being ended, should happely liue but hardly; what nation is there, which our ambitiō hath not warred on? The *Italian*, the *French*, the *Flemming*, and you the *English*; of the poore *Indians* I speake nothing, which feedeth him with wealth, which were they cut from him, or should they rebell, or should his fleets fayle him but two or three yeares together, he were in hazard to be a beggar. He aspireth all, and aymeth a conquest of his neighbour nations: but God knoweth which of them may arise in the end, and be our confusion: for my *Genius* suspecteth somewhat; and this was the effect of his speeches.

A pretie confession of a Biscayn Spaniard.

The Indian gold the sinew of the warre.

The Spaniards ambitiō warreth vpon all Christendome.

The Indias fayling, the Spaniard soone a beggar.

A good suspition.

Gent. His speeches were to be mused at, if he spake *bona fide*.

Capt. Bona fide, or not: but such were his speeches. Well now it is time for me to returne to our Colonell, from whom I haue long bene absent, by reason of your demaund.

The Colonell is to carrie a great respect to his high Generall.

To be a faithfull counsellour.

His proper arming.

To be most commonly on horse backe.

To dismount on foote his regimēt sallying out to battell.

He is greatly to respect and honour his Lord high Generall, obeying and performing his commaunds and orders with great care and diligence, procuring to keepe himselfe alwayes in his grace and fauour, being a faithfull counsellour vnto him: and to execute his Commissions (hauing first throughly conceiued and vnderstood them) with great, valour, and readinesse. His arming is the proper arming of a Captaine, but to be alwayes, or most commonly on horsebacke, prouiding and ordering all things most necessary and conuenient for the good gouernement of his companies. But if his Regiment should sallie out to battell, and all his Captaines placed in ranke, hee shall then dismount, and shall guide his companies on foote, for the honour and estimation of the infanterie: as well was shewed at the great muster of all the *Spanish* armie before king *Philip* and his Queene at *Vadaioz*, at the conquest of *Portugall*: And for as much, as the other parts which may seeme to concerne a worthy Colonell, may be considered, when we come to speake of a Captaine Generall touching his office and charge, I will conclude, concerning this officer, with the wordes of *Cicero* in his Oration *Pro*

lege

Lege Manilia: declaring the partes of a great Commaunder in warre: which is, great experience in martiall actions; deepe knowledge in hiſtories; a life not ſpotted with notable crimes; to be magnanimous and valiant; and to be beloued, feared, and followed of his ſouldiers: and finally to haue fortune to friend.

The parts to be in a great Commander in warre.

The end of the fourth Booke.

THE FIFTH BOOKE OF WARRE DISCOVRSES AND MARTIAL DISCIPLINE.

The firſt Dialogue:

VVherein is declared the election and office of a Captaine generall of the Artillerie, or Maiſter of the Ordinance: vvith certaine diſcourſes touching fortifications, as well naturall as artificiall: and the confines of kingdomes or realmes, as well Maritime as Inland: the difficultie of their defences, to barre a ſtrong enemie the entrie: with other particular points touching Fortes and fortified Townes.

The Generall of the Artillerie, or Maiſter of the Ordinance, his election and office.

Captaine.

THE place and office of the Generall of the Artillerie, or Maiſter of the Ordinance, is appointed by the Prince. His function is of great qualitie and truſt, for the reputation had of the ſame, and for the effects which the ſame performeth: and therefore is alwayes encommended and beſtowed vpon perſonages of great grauitie and authority, and of great prudence, valour and experience: for beſides the gouernement which he hath of the Artillerie of the Armie, when the ſame encampeth: it toucheth him, by reaſon and courſe of warre, to prouide for all the forts & ſtrengths of the realme; and to appoint the orders for their fortification and defence.

What perſonage to be choſen to be Maiſter of the Ordinance.

His dutie both abrode & at home.

Gent. Theſe things are no doubt of great conſideration, therefore we would

willingly heare what courſes might be taken for the fortifying and defen ce of a realme, to withſtand the enemies attempts.

Capt. The ſtrength of euery King or Prince, conſiſteth in the quantitie and quality of his ſubiects, and in the good quality of his dominion and countrie.

Gent. I pray ſhew vs more particularly hereof.

Capt. I ſay (gentlemen) that thoſe Princes and Republikes are iudged moſt mighty, which in their kingdomes and ſtates, doe maintaine, 1 good religion, 2 good lawes, 3 and good armes; and who doe enioy holſome ayre, 2 fertill ground, and 3 naturall ſtrength, with ſuch other deſirable commodities; wherefore to explane the matter more, you are to vnderſtand, that all kingdomes or prouinces are ſtrong either by nature, or by art, or by both.

Thoſe kingdomes moſt ſtrong, which do maintaine good religion, good lawes, and good armes.

All prouinces ſtrong by nature, by art, or by both.

They are ſtrong by nature, when they are enuironed with the ſeas round about, or part thereof, or backed with lakes, mountaines, riuers, or deſertes. And thoſe are ſtrong by art, which in their frontiers, and in places moſt conuenient, haue townes, caſtels, and fortreſſes, fortified by art.

Strong by nature, how.

Strong by art, how.

Gent. It ſeemeth by this, that the Captaine Generall of the Artillery ought to be very skilfull in artificiall fortifications, I pray therefore declare vnto vs, the conſiderations to be had in fortifying a place or realme.

Capt. All confines are either Mediterraneall, or Maritime, or both the one and the other; and either they are in mountainous places, or in plaine champain, or do participate of the one, and the other. If they be Mediterraneall, it muſt bee viewed and conſidered on what part the enemy might enter to offend the countrie, and what paſſages he might haue moſt commodious to conduct his Army, with his munitions and impediments. And it is to bee conſidered alſo, on what partes he may moſt eaſily make his inrodes, and retire againe with ſafety, and whether there be any ſituation, which being fortified by the enemy, might moleſt and annoy the countrey adioyning.

All confines are either Mediterraneall or Maritime or both.

Conſideration 1.

Maritime Confines.

If the confines of the kingdome bee Maritime or ſea coaſt, all the coaſtes and compaſes are to be viewed and remarked; and to ſee and conſider, whether there be any gulfe, ſhore, baye, creeke, hauen, port, or any riuer mouth, whereinto the enemy entring with his nauie, and there landing, might annoy and aſſayle a countrie. For ſea coaſts, although they be in ſome reſpects ſtrong, yet are they to be entred by a nauie by ſea, and do hold the defendant in great ſuſpence and care, not knowing where, or in what part, ſuch nauy will arriue; and ſo is he driuen to greater charge, being conſtrained to keepe garriſons in euery ſuſpected place.

Nota.

And yet it is not inough to keepe good ſtrengths in places moſt neceſſarie, and well prouided, for that many times there is found a ſhore, a baye, a creeke, or riuer mouth, not before eſteemed or thought vpon, whereunto the enemy arriuing and entring with a mighty nauy, and there fortifying himſelfe vpon ſome ſtrong and fit ſituation, doth put the countrey and kingdome in great perill and daunger. As was ſeene by the Spaniſh nauy and army, at the conqueſt of the *Portugall* kingdome, who touched at the head of *Caxcais*, and landed in a place neuer thought vpon by the Portingall, ſo they found themſelues deceiued, thinking that the diſembarkment ſhould haue beene betwixt the city and *San Gillians* Caſtle, where they ſtood fortified in their trenches, with determination to de-

A principall note Example of the Spaniſh nauy, & armes in Portugall.

fend

fend the landing. And the ſundry braue lādings of Sir *Francis Drake* in the Indias, and in many partes of Spaine and Portugall (at moſt of the which I my ſelfe haue bin) do verifie the ſame: wherby it is manifeſtly to be gathered, that ſea coaſt countries are to be defended with great difficulty, coſt, and charge, and with doubtfull ſucceſſe, yea although that they haue many places ſtrong by nature. And for as much as there be diuerſe and variable qualities of confines, and no certaine rule to be giuen thereupon, nor what diſtance there ſhould be from frontier to frontier, it muſt be preſuppoſed that the confines of a kingdome, doth hold ſome correſpondency with the circuit of a city: in the fortification whereof, the bulwarkes are the moſt important members, the which are ſet in the place where they may moſt offend the enemy, and alſo defend themſelues, and the city; regarding therein due diſtance, in ſuch ſort that the one may defend the other, with their Artillery and ſmall ſhot, and in like manner the Curtines betwixt bulwarke and bulwarke; with other aduertiſements therein to be conſidered. And euen ſo the fortes to be made in the frontiers, are to hold the like proportion, and correſpondency with the confines of the countrie, as do the bulwarks with the courtines of a city; the one being placed ſo neare vnto the other, that they may aſſiſt and ſuccour one another, and in ſuch partes as may moſt damnifie the enemy, and beſt defend themſelues.

Sundry landings of Sir Francis Drake, in the Indias and in the parts of Spaine.

Sea coaſts to be defended with difficulty and coſt.

The confines of a kingdome reſembled to the circuit of a city.

The fortes of confines what proportion to hold.

The places moſt apt to receiue offence by the enemy, being found out, and alſo to offend him, it is neceſſary to fortifie the ſame, as well the ſea coaſts as the inland, with ſtrong fortifications, caſtles, and bulwarkes taking wonderfull aduiſement, and carefull conſideration in chuſing the ſituations thereof, whether it be on plaines, or hils, or Maritime; or conſiſting of all three, vnderſtanding onely the compaſſe or circuit of the fort, with a certaine conuenient ſpace round about the ſame.

Places apt to receiue offence by the enemy, are firſt to be fortified.

Of ſituations in plaines, thoſe are ſtrong, which are enuironed with deepe lakes, great moores, and high water ſhores, and bankes, and thoſe which may bee ſunke vnder water in time of neceſſitie, as in *Holland* and *Zealand*, and theſe which haue a *Campania raza*, or plaine *Champain*, ſufficient diſtant from all things that might ouer-commaund the ſame, as is the Caſtle of *Millan* and *Antwerpe*, and ſuch like.

How ſituations in plaines are ſtrong. Holland and Zealand.

Of ſituation vpon a hill, that is ſtrong which ſtandeth in the moſt higheſt part thereof, all vnderlayed with naturall rockes round about, not hauing neare it any ſuperiour nor equall mount: for in effect all ſituations which haue a difficult acceſſe are ſtrong, when they cannot be offended from other adioyning mounts; and much more ſtronger, if not minable; as is the fort of *San Sebaſtian* in *Guipuſcua*, and that of *Denia* in *Valencia*, with ſundry others the like: for mining is the greateſt offence that ſuch fortes can receiue.

Caſtels of Millan and Antwerpe.

Situation vpon a hill, how it is ſtrong.

The Maritime ſituations are ſtrong, when they be compaſſed with the ſea, as is the litle fort at *Plimouth*, or partly compaſſed with the ſea, and the reſt deuided from the maine, by great and deepe ditches, as is the Caſtle of *San Gyllians* by *Lisbona*; or built vpon ſome toppe of a rocke, with the aboue ſayd commodities; as is the *Pennion* of *Veles Malaga* within the ſtraightes of *Gribratar* in Spaine, and ſuch others.

Maritime ſituations, how they are ſtrong. Saint Gillians Caſtell. Pennion of Veles.

All ſtrong places are expugned either by force or battery and armes, or by

How all ſtrong places are expugned.

treaſon, or by ſurprize, or by long beſieging, but we are now to treate of no more, but of the manifeſt expugnation wherewith holds and fortes are wonne, which is, by battery, by aſſault, by ſcaling, by vndermining, and ſuch like.

Cities are made ſtrong by nature and induſtrie; of that by nature, we haue already ſpoken in the ſtrength of ſituations.

Cities made ſtrõg by nature and induſtry.

Cities by induſtry are ſtrong, by the forme and by the matter.

Strong by induſtry, how.

Strong by the matter, when they haue thicke walles, great Terraplenes, and broade and deepe ditches.

By matter.

By forme.

By the forme they are ſtrong, when it is framed ſuch, that when the moſt fartheſt off that may be, and from moſt parts and quarters, it may offend the enemy with Cannon and fiery ſhot.

Circular figure.

Of this ſort are thoſe, which do moſt neare aproach vnto the Circular figure; but with good regard of the due largenes of the Curtines, and the equall diſtance of bulwarke to bulwarke.

Fortes of 5, 6, 7, 8, or 10 Angles.

There entreth amongſt theſe all Fortes and ſtrong Townes, conſiſting of fiue, ſixe, ſeuen, eight or ten Angles; and Curtaines, by direct line, and how many more Angles, ſo much the better, the foure Anguled of all others is the worſt.

The 4 anguled the worſt.

Small places of themſelues, but weake.

And it is to be noted, that very ſmall places are of themſelues but weake, becauſe they cannot ſo ſufficiently reſiſt any exceſſiue battery, and other offences, as great places may, which haue roome capable inough to raiſe defences, and neceſſary Rampartes againſt any great force: neither yet ought they to be ſo large, that the circuit therof would require a whole army to defend it.

Ouer large not long defencible.

Fortifications of Cities and Caſtels is grounded principally againſt the offence of artillery.

The fortifications of Cities and Caſtels is grounded principally againſt the offence of artillery, and is alſo defended with the ſame.

Artillery is deuided into ſizes royall and leſſer.

And it is to be noted, that the artillery is deuided and differenced, into greatneſſe or Sizes royall, and into leſſer ſizes.

Of the Size royal, is that peece which ſhooteth a bullet from ſeuenteene pound waight vpward; as is the Culuerine, the quarter Cannon, the demy Cannon, the Cannon and double Cannon; the Pedrera, Baſiliſco, and ſuch like. And for the leſſer ſize and difference, is to be vnderſtood all peeces that ſhoot bullet of waight from ſeuenteene pound downeward, as is the demy Culuerine, the Saker, the Minion, the Falcon, the Falconet, euen to the Rabinet, and Harguburze a Croek.

What artillery moſt offenſiue to fortreſſes and ſtrong places.

The artillery from whence a City, Fortreſſe or Fort, may receiue moſt offence and dammage, is that of the greateſt ſize, and greatneſſe: for of the leſſer ſize there is no great doubt to be had, ſith that the demy Culuerine can do no great offence nor dammage, and from that ſize downeward: and therefore the Bulwarkes, Terraplenes, and Parapets, are to be made in ſuch ſort and ſtrength, as they may be able to reſiſt and beare of the blow and gulpe of the artillery of the greateſt ſize: and Mattockes, ſhouels and ſpades are fit inſtruments and tooles to the ſame.

Strong places to be couſted with their conuenient members.

Reſolution taken of the forme of the City, Fortreſſe, or fort, be it either of 5, 6, 7, or 10 Angles, or of how many ſoeuer, it is neceſſarie to couple the ſame with their conuenient members, to make it of proportionall ſtrength; which are theſe following.

The members of all ſtrong places are.

Bulwarkes.

The Bulwarkes are made vpon the Angles or corners of the forme of the City or Fort, and of ſuch ſize and meaſure as ſhall ſeeme due and conuenient vnto the skil-

skilfull engyner;and they ought to be made obtuſe or blunt,and not ſharpe:for ſo they are more ſtrong and capable.

The parts of a Bulwarke are the Traueſſes or flankers;the Orecchion or Pome,or gard,or ſhoulder;the front or Curtaine;the Counter front or Spurres;the Peſtiles or Parapets; the place or roome for the artillery in the vnder Traueſſe or flanker,& in the vpper; the entrances into the one and the other, and into the place aboue. *The parts of a Bulwarke.*

The Bulwarkes,as I ſayd,are placed vpon the Angles, and from any part (you will) of the Angle is taken 120, or 130 foote, for the places of the Artillery both aboue & beneath,and for his Parapets & place of the ſame Bulwark,and at the end of this ſaid number is taken the Traueſſe vnto the right Angle aboue the Curtine of the ſayd meaſure;from the head of the which meaſure, & from the point of the firſt Traueſſe next adioyning,is drawne an indefinitiue line;& doing the like from the other part of the Angle and from the other Traueſſe, theſe two ſtraight lines ſhall come to be cut, in the which cutting ſhall the Angle of the Bulwarke be. *The placing of Bulwarkes and order how.*

And it is to be noted, that it ſhall be better that the Curtines of the Bulwarke, do ſtand in ſuch ſort, that they may bee touched or beaten from the firſt Cannonera,from whoſe flanker or Traueſſe it taketh his defence:and the point may be taken ſomwhat more diſtant from the flanker in a large Curtine; and according as one wold make the Bulwarke great or little,ſo the meaſures muſt be encreaſed or diminiſhed with conueniencie. *The Curtine.*

It is neceſſary to make in the Bulwarkes certaine iſſues or ſallies, the which are made on the part that looketh toward the flanker or Traueſſe:& the Bulwark hauing an Orecchion, they are made in the firſt Traueſſe, vnder the firſt Cannonera or Cannõ roome:and at the leaſt it ought to haue one,for that they be very neceſſary for the defence of the ditch,and to put people out thereat. And for the better to giue you to vnderſtand,I ſhould draw a Plat or figure of the Bulwarke,but time now permitteth me not. *Iſſues, or Sallies.*

The Tronera or which ſtandeth next vnto the Orecchion ought to defend the front of the Bulwarke,and part of the ditch,although the firſt may defend the whole,& therfore the point or front of the Orecchion ſhall alwayes ende with two blunt or obtuſe Angles,and ſhall be ſomwhat more narrow in the ſaid front or end, th in then beginning neare vnto the Tronera. *The Tronera, or*

The Pendent or bending of the Parapet ſhould be ſomwhat round or ſlope, to the end that the ſhot of the artillery, beating thereupon, might glance vp,for not to annoy thoſe that ſtand at the defence, which would if they are made ſtraight vpon a right line:& from the ſayd Parapet ſhall be diſcouered the couert way a long the edge or border of the ditch. The Counterfortes, and the other appertenances of the Bulwarke haue alſo their meaſures and proportions;the which I leaue to repeate to auoide prolixitie; and becauſe they may be more or leſſe,according to the deſſeigns and Plats of the perfe Inginers. *The Pendent of the Parapets.*

The Caualliero within ſide, adioyning to the Curtine. *Caualliers.*

The Caualleres within ſide adioyning to the Curtine,are builded in the middeſt of them;and from ſuch Caualleres are the Curtins or walls of the Bulwarke defended,and alſo the field. And for this cauſe are the Bulwarkes wont to be made more ſharpe,and leſſe ſtrong,and they are to be more higher then the Curtines, and open toward the field.

Caualliere a Cauallo.

Caullere a Cauallo, called a Platforme or baſtard.

The Platformes or Caùallers without the Curtines, are in like ſort built about the midle of the wall, and without, as are the bulwarkes, and his height is of the highneſſe of the wall. Theſe againſt a good battery are but weake, for that one of their flankers is eaſily beaten downe, and ſo the city more eaſie to be annoyed; and haue no more but one *Cannonera*, with his place high & low, which defendeth the great curitne & the curtin of the bulwarke: the angle is made in reſpect of the two bulwarkes. This ſort of platformes is made vpon neceſſitie, betwixt the two bulwarkes, by reaſon that the wals or curtines are ouer long, and aboue due meaſure: it were better to ſeeke ſome other remedy, and not to vſe this ſort of flankers; for they be weake and dangerous.

The Caualleres within ſide, and diſtant from the Curtines.

Cauallero, or a mount within ſide diſtant from the curtine.

The Cauallers aparted from the wals, are built in places which haue any high ground without, and oppoſite, which may diſcouer and annoy the city; and on ſuch part where the enemy may come in couert, euẽ vnto the ditch, without being ſeene or annoyed: they are to be made of ſuch height, as may ſuffice to ſee ouer the ſeat that it wold diſcouer; and are made ſo broade and large, as may be capable for the artillery, which is pretended to be there planted, and the thickneſſe of the Parapets, as ſhold be ſufficient; for they come firſt to be battered with the enemies artillery: and are to bee builded ſo farre diſtant from the walles, that the ruines, when they be battered come not to annoy the ſouldiers, that ſtand at the defence. Theſe Caualleres ought in no wiſe to be made within the bulwarkes, for ſo it wold occupy the place that ſhould ſerue to defend them; but to be built in ſome place behind them, or on ſome other part; they haue alſo their Scarphe or Alambor, and are to be open on that part next vnto the towne, with their entrances good and ſure from any offence that might come from without.

The Tenazas, or

The Tenazas, or

The Tenazas are made in place of the platformes, being ſet within the wall; and alſo are built in hilly ſituations, vpon, or toward the turning of the valley: and are the beſt manner of flankers, for it is nothing elſe but a Curtine defended with his bulwarkes.

The Tizeras, Dientes, and Caſamats.

Tizeras, and Caſamats, or

The Dientes and Tizeras, and other ſimple flankers, are to be accommodated in ſituations or ſeates ſtrong by nature; for they come euill to purpoſe on plaine grounds, nor in place that may be battered: and therefore the curtines which be defended with ſuch manner of Traueſſes ought to bee ſhort; for hauing but one flanker they are but badly defended. Their meaſure or ſizes are bigger or leſſer, according to the quality of the ſeat where they be ſet.

Caſamats were wont to be made in ſteede and place, where we now plant our platformes

Platformes, but ſo low that they arriued not vnto the alture of the ditch. They are vnprofitable, for they are ſoone ouer couered with the ruine that falles from the battery, and ſmothered with the ſmoke of their owne Ordenance: for they bee all cloſe and couered, and do giue meanes vnto the enemy to aproach neare vnto the walles, with trenches, or ſuch like aprochings.

The gates of the City, or Fortreſſe.

The gates or portes are to bee placed in partes moſt commodious for the ſeruice of the city, both in peace and warre, conuenient to receiue in, or put out people, neceſſary, and moſt ſafe and ſure from all manner of offences, and ſo low that the ditch may hide and couer them. The gate muſt haue his draw-bridge made of timber, and his raſtell or drawer of ſtrong timber or iron; and muſt alſo haue his *Serraceneſca* or *Percluys*. *The gates.*

The way which commeth from without, ſhould not come direct vpon the gate, to the ende it be not eaſily diſcouered into the field; but of ſufficient wideneſſe, for the paſſages of cartes, waynes, and artillery; and of a moderate highnes. *The way from without.*

The Terraplene, and place or broade way behind the ſame; and the ſpaces of Retreats.

The Terraplene, the only remedy againſt the fury of the artillery, is to bee made within, or cloſe behind the wall, and within the bulwarke and caualleros. It ought to be framed in ſuch manner, that the wall being falleh, the ſame may remaine and ſtand like a mighty mount againſt the enemy: and ſhould be made of ſuch faſt and maſſie earth, that it crumble, ſlippe, nor rowle not, and ſo fall downe; as did a fortification made at *Carthagena* in Spaine, for being made of running ſand. The height and breadth thereof ought to be ſuch as the commodity and ſeat will require. *The Terraplene.*

Toward the City on the inner part, it ought to decline and bend downe by little and little, for the eaſie aſcending to the defence of the wall; not onely for the looſe ſouldiers, but alſo for a formed ſquadron, and the artillery. There ſhould be within at the very foote of the Terraplene, an open way round about the city, and withall, behind the ſame, certaine conuenient ſpaces and roomes to containe ſquadrons of ſoldiers for to ſuccour & relieue thoſe that ſtand at the defence of the walles, and alſo to make retraites into, when neceſſity ſhould conſtraine. *An open way at the foote of the Terraplene.*

The ditch ſmall or great.

The ditch is made on the out ſide round about the wall, and ought to be made ſo deepe, and caſt vp ſo high, that it ſhould couer the wall; at the leaſt vnto the Cordone, and no more but to the beginning of the Parapete; for that, for to batter the wall, the enemy would be conſtrained to mount vp: and ſhould be of ſuch wideneſſe, that it might not be well paſſed ouer with bridges, ladders, or other engines, and difficult to be filled with any matter. It ſhould haue in the middeſt a little ditch or gutter, which ſhall ſerue as well to receiue the waters, as to aſſure *The ditches.*

them somewhat from the myne; and also to giue some hinderance to the enemy, when either perforce, or by surprise, or by treason, they should enter into the ditch. At the end of the ditch there should be made a close way or passage, by the which the souldiers might secretly sallie to annoy the enemy; and to defend the ditch; and themselues to be defended from the wall: and round about the ditch there should be another like vault or priuie way.

The Campania raza, or plaine Champain, without the towne.

Campania raza. The *Campania* or field without the Citie ought to be razed or plained a thousand paces round about, beginning from the border or ring of the ditch; or at the least of sixe hundred paces: and there should remaine neither ditches, wals, gardens, orchards, nor buildings, nor boundes, nor by-pathes, nor hollow wayes, nor any thing else that might yeeld meanes vnto the enemy to approch the Citie, without being endangered: rasing downe in like sort, all other things that might serue for *Cauallero* or Mount, to aduantage the enemy to the batterie.

All these things are the members of a fortification, the which how much more fit, and proportionally they be placed about the body and circuite of a Citie, so much doth it make the same more strong and beautifull.

THE SECOND DIALOGVE.

Wherein is entreated of the refortifying of any old Castels, Townes, or Cities, with the considerations to be had in the same: fit for the safetie and defence thereof.

Gentleman.

Refortifying of old places of strength. YOu haue declared of most things necessary to any new fortifications: but now, because more commonly old Castels and Cities be repaired and refortified, then new forts erected; I pray, what order is there to be taken in such refortifications?

Situations of Cities and fortresses. *Capt.* All Cities, Townes, Fortresses or Castels, do stand either on a plaine or on a hill, or on the sea shoare (as before is sayd) or else participating of all three: now whether it be on maritime confines, or in land boundes, before that one come to raze downe the old wals, and to build vp new, these matters following are first to be cõsidered, as well for the situation without as within.

Annotations of the out situations.

Annotations of the out situatiõs. It must be remarked and considered if the Citie or situation without be vpon a hill, or on plaine, or participating of both; and of what sort is the one and the other, of these qualities: if there runne any riuer along by the Citie or neare it, of what quantitie or greatnesse it is, and toward what part it runneth: & if it haue any lake or poole adioyning neare vnto it, of what greatnesse it is, or of what store of water; or if there be about it any litle hils or bankes which might endammage the place: or if there be any valleis, bottoms, or hollow wayes, where the enemy might be hidde, and come to annoy the Citie; of what qualities the mount or hill

is,

is, whereupon it is ſeated, either if of hard ſtone, or of ſoft, frangible, and eaſie. Now if it be in a plaine, there muſt be conſidered (aboue the aboue ſaid) how the ditch ſtandeth, how the field, and how the riuers runne.

It is alſo to be noted, that if in any of theſe ſituations there be neare adioyning any woods, vineyards, orchardes, gardēs, tuffe of trees, houſes, Churches, Monaſteries, or other edifices, conſidering whether they be ſuch as may annoy the enemy, or render him any commoditie, whereby he may eaſily harme the Citie. *Annotations.*

If the ſeat of the citie, fort, or fortreſſe, be maritime, or ſea coaſt, t[illegible] muſt be conſidered the qualitie of that ſea, and of the hauen or port, and of what depth it is, whether it hath any litle Iſle or rocke neare vnto it, the which the enemy enioying may offend and annoy you, and whether it hath any ſhoare, bay, receptacle, or place of refuge, or any riuer-mouth, where the enemies fleet riding eaſily at an anker, might hinder & empeach their ſuccour by ſea, and continually moleſt them: what diſtance there is from the wall vnto the ſea, and whether it bee ſuch that the enemy may aduantage himſelfe therewith: & all the aboueſayd conſiderations touching the ſituations of ſea or land, noting the ſame with great care, heede, and forecaſt.

Annotations of the ſeate within the Citie, Fort, or Caſtell.

The ſame care and regard is to be had within the place, and to reknowledge euery part thereof particularly; beginning with the forme, and then the height and thickneſſe of the wall, and the qualitie thereof: moreouer it is to be viewed in what part it is moſt weake and feeble; what flankers it hath; what *Terraplene*; how high, and how thicke; what ſpace betwixt the ſame and the habitations and dwellings: what gates, how framed and ſeated: what ditch; how broad, and how deepe: whether dry, or with water: what entries, or ſallies: of the waters without the place, Citie, or Caſtell, or within; whether by open *Canales*, or by couered *Aquaductes*: whether the moſt habitations of the Citie be on high aboue the alture of the wals, or equall with them, or whether the wals doe ſurmount the Citie: and finally all other conſiderations, worthy to be noted. *Annotations within the place.*

Theſe conſiderations duly had, & reſolution taken, then a plat muſt be drawen with conuenient rules and meaſures to reduce the ſayd Citie, Towne, or Fort, to the beſt forme that may be, with as litle ruine & defacing of houſes or churches as may poſſible be, placing the bulwarks, the *Caualleros*, & the *Tenazas*, & other edifices conuenient to their ſeates, ſometimes ſhortning, ſometimes enlarging the place; profiting thēſelues with the old buildings (being good thereunto) taking away the litle Turrets which ſtād betwixt the traueſſes; reducing the wall vnto the due altitude, putting the *Terraplene* a litle diſtant from the ſame, for not to beare it downe; helping it with fagots, bauens, and ſuch other ſtuffe. *A plat to be drawen.*

The ditch ſhould be made with all his appertenances, and conuenient meaſures.

And for as much as old Townes, Cities, and Fortes, being of diuerſe formes, ſome round, ſome of ſharpe angles, and ſome of obtuſe angles, or right, with their Curtines either long, or ſhort out of meaſure, it would be impoſſible to giue any particular rule for euery one: therefore it were good and neceſſary that the

Skilfull Enginer. skill full Enginer ſhould aduantage himſelfe with the already ſayd rules and meaſures commodious, and with his owne good wit and iudgement: for ſo may there be fortified any place vpon any manner of ſeat: onely he ought be aduiſed to profite him with the old to ſpare his maiſters purſe what he may, but yet without ouermuch damnifying and weakening the fortification.

To fortifie the feebleſt partes firſt. Reſolution taken vpon the deſſeigne or modell of the forme and greatneſſe that the Citie or fortreſſe is to haue, hee muſt begin to fortifie the feebleſt place firſt, and the apteſt to be offended, foreſeeing, and prouiding, that before he ouerthrow any of the old, that that which hee buildeth a new, may ſtand in defence. There ſhall be made gates, and ſallies, and their ſtreetes both within and without: and the ſpace or way behind the *terraplene*; and round about without ſhall all things be made plaine and diſencombred: and with other appertinances, as before is declared.

Gent. There be ſome Cities & townes compaſſed about with ſuch altures or heights, that the ſouldiers cannot wel ſtand at the defence thereof, without being endāmaged either in front, in flanke, or at the backe: what remedy is there for that?

Remedie and defence of a place, annoyed with diuerſe altitudes.

Places annoyed by diuerſe altures, the remedies. *Capt.* The beſt & moſt ſecure remedy ſhall be to take in the ſayd heights with the wals of the citie or place: but when, for good reſpects it cannot ſo be done, the wall ſhould be withdrawē inward ſo far, that the offences cōming frō ſuch moūt, being ſo farre diſtant, might come to be of litle effect or force: and when none of theſe two things may be done, then being in front it is neceſſary to fortifie in *contra* ſuch a ſtepdame, that might be able to reſiſt all rigour offred from the ſame, placing againſt it a ſtrong and gallant point of bulwarke, if the ſeat will permit it; in ſuch ſort that from ſuch a ſtepdame, the Cannoneras of the flankers, which are to guarde this bulwarke, may not bee embocked or ſtopped vp: for it muſt be procured, what poſſible one may, that the Cannoneries be not offended and annoyed. And if there cānot be placed a good point of a bulwarke, then build there a *Tenaza*, that is, to wit, one Curtine with two bulwarkes, making them well proportioned, and to purpoſe; and much more higher then accuſtomed, with a Cauallero, or mount to the ſame in place moſt conuenient, which may ouertop, or at the leaſt be equall to ſuch an annoying height: Or a Cauallero without, with ſuch Parapets and capacitie, as ſhould be conuenient vnto ſo great an annoyance. And if the vpper partes may be yet endammaged, then raiſe the wals ſo high, that they may be ſhadowed with an archrooffe couered with good earth and turfe: and if this yet ſuffice not to ſhadow the defendants, although that the Parapets bee more high then accuſtomed, raiſe them yet ſo much higher, as might ſuffice; and make the Cannoneries that they may ſhoot from aboue ſomewhat downeward, to the ende they may not be annoyed by ſuch a ſtepdame; and make the *Terraplene* within full of ſteps or greſſes, for the defendants to paſſe vp to defend, and to deſcend at neede or time to be ſhadowed.

A point of bulwarke. *Tenaza, what it is.* *Cauallero, or mount.* *The canoneries.*

Trees to be planted vpon the terraplene. Vpon theſe *Terraplenes* ſhould trees be planted, if the ground will beare it, and that well and thicke; for, beſides that they doe their part in ſhadowing, they will helpe

helpe alſo to faſten the earth; and will ſerue to make fagots, and other conueni-
ent reparations. The ditch ſhould be made ſomewhat deepe then ordinary, with
his litle ditch or gutter in the middeſt, and with his wels for the countermines.

When the defendants might be annoyed on any flanke, defending any Cur- *Flankers.*
tine, then ſhould there be made flankers & Caualleros all alõg ſuch Curtines on
the inner ſide, & of ſuch height as they may couer the ſaid Curtine, with their en-
trances from the one to the other, which might giue commoditie to the ſouldiers
to go and paſſe to the defence. Being offended on the backe part; the remedy is, to *Remedie againſt the backe part of fences.*
make the like Parapet as is on the fore part of the Curtine: and in any manner or
ſort, trees be aduantageous on euery *Terraplene*, ſith they do ſhaddow, that the
enemy cannot diſcouer what is done within. And moreouer they do helpe to the
vſe of fortification, as well with fagots, as with other needfull timber; and do de-
fend & beare off the inconuenience of bluſtring ſtormes and winds, from the in-
habitants within.

Theſe, and ſuch others are the remedies to be obſerued againſt the abouеſayd *Three manner of offendings.*
three manners of offendings. But if all theſe three might be remedied, by taking *An ouer commaunding wall is a ſtepdame to a fortreſſe.*
the ſaid mount or ſtepdame that offendes & damnifieth the place; or to apart frõ
it as wide as were needfull, I ſuppoſe that that were the beſt: for otherwiſe, the
time permitting it, and the qualitie of theſe confines, it would be better to chuſe
another ſeate for a new fortification, leſt that by a long and gallant aſſailling, it fall
at laſt into the enemies hands.

It is not onely ſufficiẽt, that the Citie, Caſtell, or Fort, be well fortified in ma- *A ſufficient garriſon of defence.*
ner as abouеſaid, or in any other better, if alſo it be not ſufficiẽtly furniſhed with *What conſiderations to be had & what prouiſions to be made.*
a conuenient garriſon for defence thereof: for ſo were it like a body without a *Needefull implements, at batteries offenſiue and defenſiue.*
ſoule; and beſides this, if it haue not prouiſion of all ſorts of victuals, artillerie and
munition, and of all other armes offenſiue and defenſiue, in good and ſufficient
quãtitie: and of ſhouels, ſpades, mattocks, pickaxes, hatchets, axes, ſawes, wedges,
hammers, iron-ſledges, barres of iron, nayles, ropes, &c. and other neceſſaries to
worke in earth, or in the wals, or in ſtone, or in timber, and alſo in water; maunds,
baskets, hampiers, and ſmall hand-panniers, hand-barrowes, and wheele-bar-
rowes to carrie earth; barrels, tubbes, ſacks, boordes, planckes, beames, poſtes,
rafters, ſtakes, watlings, gabbions, and all other things needfull, at batteries, and
beſieging; without the which it is impoſſible to rampire, repaire, and to retrench
againſt batteries, aſſaults, and other offences of the enemy. All the which belong
vnto the office, care and dutie of the Generall of the Artillerie, to ſee them proui- *All the which belonging to the office of the maſter of the Ordnance.*
ded in euery towne of garriſon and fortreſſe of defence within the Realme, which
ſtands for the defence and ſafetie of the ſame.

Gent. Theſe fortifications you ſpeake of, are very coſtly, and not to be perfor-
med but by a mightie Prince; therefore is there no other meane of fortifying of
leſſe charge, then bricke, or ſtone and lyme?

Capt. Yes truly, in mine opinion; The which is done onely with good earth *Fortifications of earth and turfe of great ſtrength againſt the cannon with ſmall charge.*
and turfe, without any ſtone worke at all (or litle at leaſt) framed in manner and *Obiection.*
forme as theſe aforeſaid: and as I ſuppoſe, of as good or better effect, againſt the
Cannon, thẽ the other, by reaſon of the great ruines that the other maketh, at any
forcible batterie, and ſo more eaſie to be aſſaulted: although it may be obiected,
that theſe fortifications of earth are of leſſe during and ſmall continuance, eſpe-

cially where the same is enuironed with wet ditches, and those of running water.

Answer. True; but the repairing thereof is of litle charge, time & labour, in respect of the charge, time and labour of the other; which is not performed (if the place be of anie greatnesse) but with expence of Millions: as may appeare by *Antwerpe* & the Citadell thereof, the Castell of *Millan*, the Citadell of *Turine*, and the Citadell of *Mets* in *Lorraine*, with sundry others the like. On the contrary, let vs marke and note a number of other places fortified with earth and turfe onely, as is the great towne of *Gaunt*, and as was *Oudenard*, *Sluce* and *Maistricht*, and sundry other places in the Low countries, which haue endured such gallant batteries & fierce assaults, sufficient to wearie a great Prince his power and purse, and sundry other goodly Cities in East Germanie, which I haue seene fortified in no other sort: and from thence may be gathered (comparing the charge of the one & the other, and the effectes in fine to be as one) that the fortifications of earth may serue to good purpose, and of continuance sufficient.

THE THIRD DIALOGVE.

Wherein is set downe the particular officers belonging to the great Artillerie, vnder the commaund and charge of the Maister of the Ordenance: the boates for bridges, and the Artillerie, with all the appertenances to the same, needfull to an Armie royall.

Gentleman.

TOuching fortifications of either sort, and of the alterations and refortifying of old towns & Castels, we haue vnderstood sufficiētly: but when there is anie Armie leuied, what charge hath he therein?

An armie leuied, the charge of the Maister of the Ordinance.

Capt. When there is an Armie newly leuied and framed, the Captaine generall of the Artillerie, or Maister of the Ordinance, as we call him, hath vnder his charge the Artillerie thereof, with munitions conuenient of all sorts, kinds and qualities; and armour and weapons for the people of warre, aswell foote as horse: and vnder his commaund they are kept, deliuered, ordered and distributed. And to carrie the same, he conducteth vnder pay, horses, oxen, carts, waines, carters, wainemen, enginers, gunners, carpenters, smiths, foūders, armorers, mariners, calkers, pioners, labourers, & other people of such seruice, which both ordinarie & extraordinarie, are wont, and ought to be vnder his charge and gouernement, for the seruice, vse and conseruation of the Artillerie, and of the Armour, and of all sorts of Munition: and for bridges, barks & boats, and other Addresses and engines, which are vsed and needfull to be framed to passe riuers, and other passages, according as cause and occasion shal be offered. And for the administration and seruices of all the which rehearsed things, to assist and helpe him, he hath these officers following, among the Spaniards.

Carriages & people belonging to the Maister of the Ordinance.

Bridges built vpō boates.

Officers.

The Officers which do assist the Maister of the Ordinance, are these.

Clarke of the Ordinance.

The Clarke of the Artillerie or Ordinance, who keepeth account of the payes, and other charges made in the same, by *Libranzas* or tickets, from the Maister of the Ordinance, and an officer vnder him.

The

The Paymaiſter of the ſaid Artillerie, and his officer. *Pay-maiſter.*

The Comittie, or Purueyour generall, who hath charge to prouide all Baſtiments, prouiſion, and other neceſſarie things for the people attending vpon the Artillerie. *Purueyer generall.*

Fowre Lieutenants to the ſaid Maiſter of the Ordinance. *Lieutenants.*

Fowre Maiordomes or Stewards; who haue the charge of the ſaid Artillerie, & of the munition, and things thereunto appertaining, whereof they are to giue accompt: the one taking the charge of the mounted Ordinance, and the ſhot and powder of the Cannon, &c. The other, of the powder for the ſmall ſhot, match, lead, pikes, launces, murrions, corſlets, muskets, calliuers, and of the artificiall fires, or fireworkes, with their appertenances. And the other two, of all the other things neceſſarie, and otherwiſe belonging vnto the ſaid Artillerie; and of all the tooles for the Pioners, and of all ſorts of iron-workes, and nailes of all ſorts, with all neceſſaries that belong vnto the cariages of the Ordinance, and carts and wagons for the ſame: as, wheeles, axeltrees, ladles, ſponges, rammers, linepinnes, leauers, wedges, and all ſuch other implements, as do appertaine vnto the ſayd Artillerie; and wine, and vineger to coole the Ordinance, ſope, candles, cordage of all ſorts, with lanternes, creſcets, iron chaines, and ſuch other things: all the which are to be diſtributed by order of the Maiſter of the Ordinance. This office of fowre Maiordomes may be reſumed by one, being a verie ſufficient man, hauing three officers vnder him. *Maiordomes, and their ſeuerall charges.*

A Furrier Maior of the Artillerie, and one other to repart the prouiſions. *An Harbinger Maior.*

A Chaunceller. 30 Gentlemen of the Artillerie, which do attend vpon the perſon of the Generall of the Ordinance. 30 Hargulutiers or hargubuze on horſebacke, attending alſo vpon him: 8 Halbardiers for his guard: two or three Interpreters attending vpon his perſon; a Miniſter or Preacher, a Phiſition, a maiſter Chirurgian and his ſeruant, a Trumpeter, two or three Enginers or more, two or three Refiners of powder, or as neede ſhall require. *A Chancellor, & other perſons attending.* *Other people belonging to the Commaunder.*

With euery peece of Ordinance that is in the campe, there ought to go two or three Gunners. Beſides there muſt be, Mine maiſters, Smithes, Cowpers or Carpenters, and Wheelewrights, to make wheeles, axeltrees, and coffers, belonging to the Artillerie, ſome fifteene or twentie, according to the number of the Ordinance. *Gunners & other Officers.*

Boates and Bridges.

To paſſe the Armie ouer deepe riuers, they vſe to carrie great boates and barges of a yard deepe by the board; whereupon they frame Bridges made of ſtrong timber and plankes, as did *Soliman* the great Turke to paſſe his Armie ouer the riuer *Drauo* or *Drylo* in *Dalmatia*, whē he went to expugne *Ciguet*, where he died. And had *Don Sebaſtian*, that vnfortunate king of Portugall, caried ſuch boates and bridges with him, at his vnluckie iourney into *Barbarie*, to haue paſſed with them ouer the riuer *Lucus*, and marched towards *Alarache*, and not thruſt himſelfe ſo farre into the countrey as he did, happily he and his Armie had not bene ſo fowlly ouerthrowne as they were. But when God will ſuffer a Prince to fall to his foyle, he ſhall neuer aſcertaine nor hit vpon anie good direction and counſell, but runneth headlong vnto his wracke and perdition. *Boates & barges whereon to frame bridges.* *Solimā the great Turke.* *Don Sebaſtian king of Portugal.* *God ſuffering a Prince to run to ruine, bereaues him ſence & wits.*

The Prince of Parma his bridge made ouer the riuer Chaldis.

The Prince of *Parma* made the like bridge ouer the riuer of *Antwerpe*, but of more wonder and ſtrength, ſeruing vnto two great purpoſes: the one, to ſtop the paſſage that no ſhipping with victuals might come vp to *Antwerpe*, then by him beleaguered, and the other, to paſſe his campe out of *Brabant* into *Flanders* at his pleaſure.

Boates for the bridge how many

They are vſed to carry for theſe bridges, ſome 20, 30, or 40 boates, according to the greatneſſe of the riuer, to cary and conduct the which, theſe people & officers enſuing are needefull.

A Captaine of the boates, with officers and mariners.

A Captaine of the boates, a maiſter workeman to ioyne them together, 20 mariners and calkers, or more or leſſe as ſhall be needfull to the number of the boates, ſixe horſemen to conduct them when they paſſe by land; eight men who haue in their charge the iron workes, cables, anchors, and grappling, foure men to annoynt and greaze the axletrees of the carriages and cartes in going; one ſmith and his man, a wheele-wright and his man.

All theſe people doth the Captaine of the barks command and conduct, and ſee to them that they haue their tooles neceſſary, and about them, and to prouide them cartes, waines, or wagons to cary them.

Moreouer there ought to be in the camp ten or twelue ſmiths, as well to make and mend Irons needfull, as to ſhoe horſes, and ſuch like ſeruices.

Gent. What number and ſort of Artillery is vſed to bee caried with an Army Royall?

Capt. Such as ſhall be thought neceſſary, according to the greatneſſe of the enterprize, and the Princes pleaſure: but ſuch as are vſed to be carried in ſuch iornies by the French, Italian, and Spaniard, I will as neare as I can ſhew you.

The Artillery more or leſſe, that is vſed to be conducted with an Army.

The Artillery vſed to be conducted with an Army, and the neceſſaries thereunto belonging.

30 Cannons for battery, that ſhoote bullet from 44, 50, 60, and ſome 70 pound weight; from 6, to 10 inches in height.

20 demy Cannons, from 24 pound bullet, to 30 pound.

20 Culuerins, from 16 pound, to 20 pound bullet.

15 demy Culuerines; 20 Falcons: 25 Falconets; and 12 Sakers.

5000 Quintals or Centenaires of Cannon powder, to remaine in the place of garriſon of moſt reſpect, oxe hide to couer the powder in cariage; 600 quintals of hargubuze powder, and a number of lether bagges or ſatchels, to cary powder behind men on horſebacke, and when any battery is ſet.

9 or 10 thouſand Cannon ſhot, 7 or 8 thouſand demy Cannon ſhot, 3 or 4 thouſand Culuerine ſhot, 3 thouſand demy Culuerine ſhot, 2 thouſand Falcon ſhot, 2 or 3 thouſand bullets of lead for Falconets, 6000 ſhot of diuerſe ſizes. All theſe ſhot and bullets muſt be carried in coffers, and ſtrong maunds made of oziers or mats, 300 Centenaires of lead, 500 Centenaires of match, 2000 iron ſhouels, 7 or 8 thouſand mattocks, 4 or 5 thouſand pickaxes, 2000 axes and hatchets to cut wood, 1500 wood hookes, and tooles to make faggots: the greateſt part of all theſe iron tooles are to haue handles, and healues. There muſt alſo bee tables, plankes, & boordes, & good ſtore of ſuch other timber for many neceſſary cauſes:

great

great ſtore of hand maundes,and baskets to cary earth to the baſtion, & gabions; ſea compaſes alſo, and 4000 great iron nayles for the cariages of the Artillery, and of other midle and leſſer ſizes: foure great ſawes,and many ſmall; eight great iron ſledges to breake rockes and great ſtones, to make the way plaine for the cariages:20 iron crowes,and iron barres as many:150 quintals of iron:50 quintals of ſteele: 20 augers of the great ſort,middle,and leſſer ſort; two *talladores* or, which are engines to mount and diſmount ordinance: and many ſpare chargers or ladles of braſſe,and many rammers,ſponges,and ſuch like,for double Cannon, Cannon, Culuerine,demy Culuerine,Saker,Minion,Falcon,&c.

Good ſtore of nayles of ſundry ſorts,as well for the wheeles of the Artillery,as for ſundry other purpoſes;many chaines of iron to draw the artillery;ſtore of iron cloutes for the axletrees, with ſome iron bands for the wheeles; two *Romanas* which is a certaine skale or beame to weigh powder,match, &c. All tooles appertaining vnto a ſmiths forge.

Horſe nayles and horſe ſhoes of all ſizes; good ſtore of Cotton match for the lint ſtockes;cordage of ſundry ſorts;ſmal cables for the artillery;certaine cariages, or beds for the Artillery; and ſpare wheeles to the ſame: with axletrees, and ſuch like:certaine cartes and wheeles extraordinary to cary the munition.

Eight great coffers, whereof 2 to be full of tallow candles, for the Carpenters and other officers to worke by night,and 2 with lanternes,and 2 with cere-clothes and the other 2 with torches and wax candles,and ſuch other lights:150 kinderkins and barrels to cary the ſmall cordage, and ſmall iron ware,and greaſing for the axeltrees,50 kintals of ſoape, tarre, & ſoft greaſe to annoint the axletrees of the cariages of the ordinance;60 bundels of ſcaling ladders, & 3000 muskets and caliuers in ſtore.

Moreouer there muſt be caried with them to make artificial fiers,ſome quantity of *Sal niter*,or *peter*,as we terme it, Brimſtone,*ſal guma*,*camphora*,pitch,rozine, turpentine,tarre,cole of young haſell,or willow,*aqua vitæ*,liquid vernize,*tutia*,arſenike,*alexandrina non præparata*, linſſeede oyle, common lampe oyle,*Cal viua*, quick-ſiluer, waxe, ſtrong vineger,and ſalt-peter three or foure times refined:of all theſe no great quantity,for they be coſtly,and ſeldome vſed.

Gent. Truly it is a wonder, to heare and conſider what a number of diuerſe & ſundry things do of neceſſitie,appertaine vnto this great ordinance,and the number of officers and people to gouerne the ſame: the horſes and oxen to draw thē: ſuch ſtore of cartes,waines,and wagons to carry the munition:which muſt needes be a wonderfull charge vnto a Prince,which either voluntary or conſtrained,doth vſe many of them, as of neceſſity any Prince maintaining war, either offenſiue or defenſiue,muſt needes do.

The charge of great ordinance is wonderfull.

Capt. Therefore haue I made this large relation,rather to let you vnderſtand the exceſſiue charge that a prince is at in managing of war,thē of neceſſity to be inſerted in this place:eſpecially being in continual actiō,as the Spaniard is: wherefore I ſay,as did the yong *Biſcaino* one of his ſubiects,being in examinatiō with me as before I told you,that without the Indies, the ſpaniſh king were ſoone a begger. And much more wold you wonder,ſhold I make a particular recital of the charge he is,and hath bin at,in the long warres of the Low countries; in his preparation for the cōqueſt of *Portugall*;in his fleete & action vnto Tercera Iland;in his proud

The Spaniard in continuall action. without the Indies the Spaniſh king ſoone a begger.

attẽpt againſt vs; In his brables in *Britayn*; beſides the incredible nũber of his piſtolets continually flying in (almoſt) euery nation, to infect, corrupt, and pierce the mindes, hearts, and ſoules of good Princes ſubiectes, to their Princes annoyance, and their owne confuſion in fine. *Italy*, *Fraunce*, and *Flanders*, too full of his pencionary troupes: I pray God, that other nations taſt not of his infection.

The Spaniſh gold infecteth good princes ſubiects.

THE FOVRTH DIALOGVE.

Declaring the number of beaſtes to draw each peece of Ordinance: what people, and officers to attend them: the duty of the Maiſter-gunner, and others vnder him. Item ſundry other parts and duties belonging to the Captaine Generall of the Artillery, as at battery and ſuch like, the quantity of powder, correſpondent to euery ſeuerall peece: with other martiall annotations.

Gentleman.

WHat number of oxen and horſes are neceſſary to draw euery particular peece of great Ordinance?

Horſes to draw a Cannon of the greateſt ſize, &c. Horſes to draw a Culuerine.

Capt. To draw a Cannon of the greateſt ſize, they vſe to put 24 horſes or oxen in faire weather, and in foule 30. And for a demy Cannon 18 or 20. And to draw a Culuerine in faire weather, 24, & in foule weather accordingly. To draw a Saker 12 or 14 beaſts; and for a Falcon 8 beaſtes, &c.

Carriage of Cannonſhot and other munition.

A good cart, waine, or wagon, will cary 60 Cannon ſhot, and of others after that rate, and are drawne with 6, or 8 horſes: and after the ſame order and waight, go the other carts and cariages with powder, leade, match, iron, iron-tooles, armour, and all other munition. One cart to cary a bridge barke: and all theſe things conſidered, the Captaine Generall of the Artillery taketh vp all theſe cartes and beaſts at the Prince prices, being in their owne dominions; and in other countries as he may get them for pay.

Gent. Then being in others countrie, what order is to be obſerued herein?

Order for beaſts and Carriages.

Capt. The Maiſter of the ordinance agreeth and bargaineth with ſome certaine perſons who do offer themſelues to ſerue in the actions with a thouſand horſe or two, as did one *Andrew Dun*, in the ſeruice of *Charles* the fift, in his warres of *Gelderland* and *Fraunce*.

Gent. What people and officers are neceſſary to attend vpon, and to conduct theſe cartes and carriages?

The officers and people for the carriages.

Capt. Firſt the principall perſon ouer all the ſaid horſes, with 2 halberdiers attending vpon him, a clarke to take the account and muſter of all theſe cariages, with his halberdier attendant, a Harbenger, and a Mayorall, which goeth with euery thouſand beaſts, a Gill Maiſter, or Lieutenant to the Mayorall, ouer euery 200 horſes or beaſts; a Prouoſt ouer the horſes which draw the Artillery, two Carpenters, and two ferriers or ſmithes.

Gent. There would neede a great number of people and ſtrength to lade and vnlade all theſe cariages; and to helpe about the Ordinance?

Pioners, vnder the Maiſter of the ordinance, & to what purpoſes.

Capt. True, and therefore the Generall of the Artillery hath vnder his charge, a great number of labourers or Pioners, which of neceſſity muſt be had in a camp, and follow an Army, to make trenches, Rampiers, Minings, Countermines, ditches,

ditches,caues;to make plaine the wayes for the army to march; to accommodate the paſſages for the Artillery to paſſe; to raiſe mounts to plant ordinance vpon;to place and fill the gabbions; to digge earth for the ſame;to vndermine wals, and townes, and to raze thoſe of any gained places downe; to cut timber to fortifie withall; to digge wells for water, and great pits to bury and to caſt therein, the garbedge, filthineſſe, and offalls of the campe; and ſeruing to a number of ſuch neceſſary vſes.

Captaines ouer the Pioners.

Ouer the ſayd Pioners there are Captaines appointed to gouerne them,which ſhould be men very expert in fortifications, trenching,mining, counter mining, and in all ſorts of engines concerning a campe, and battery actions: and therefore beſides their experience, they ought to be learned and well skilled in all maner of fortifications, both in campe, towne,or fortreſſe. Theſe Pioners do go before the campe with a ſufficient band of ſouldiers for their guard,carrying with them mattockes, ſpades, ſhouells, pikaxes, crowes of iron, barrells, baskets, hampiers,and ſuch other tooles; and ouer euery three or foure hundred Pioners a Captaine.

The Pioners guarded by ſouldiers.

The Pioners tooles.

A maiſter gunner ouer all the gunners.

The gunners ought to haue ouer them a Maiſter-gunner, to rule and commaund them, and to ſee that they do their duties,and to be men ſufficient in their art. He ought alſo to ſee all things prouided and neceſſary for the Artillery, as carriage, axletrees,wheeles, ladles,ſpunges,rammers,iron crowes,leauers, ſhouells, mattocks, gabions, baskets,ropes,chaines, coynes for the breetch of euery peece, to coyne it vp or downe: powder both ſerpentine and corne powder; cotton match,lintſtockes,priming irons, their rules or inſtruments to take the leuell, Taladros that is, engines to mount and diſmount the ordinance; ſhot of all ſorts and ſizes,and heights; cartages of all ſizes; trunckes, arrowes and balles of wild-fire, and ſtuffe to make the ſame, with all things neceſſary to his charge, office,and art;giuing ſtill his diligent attendance vpon the Maiſter of the ordinance,to know his orders and commands,executing the ſame with all diligent care and fidelity.

His office and charge for neceſſary tooles.

The maiſter of the ordinance his principall care and charge.

It behoueth the Generall of the Artillery to procure and ſee all theſe aforeſaid matters prouided, and good orders kept in the ſame, as ſuperiour commander therof;& that there be ſufficiēt prouiſions of al kind of munitions & armes,as well defenſiue as offenſiue,both for the infantery and Cauallery,& that there be wonderfull care had in the conſeruing of the ſame, giuing order and charge thereof, vnto the Mayordomes; the which they are to diſtribute and deliuer out by Librazas,or Tickets, from the ſayd Generall of the Artillery,or elſe not.

Gentlelmen of the Artillery.

The Gentlemen of the Artillery attending vpon his perſon, ought to be men of great ſufficiency to execute any orders by him cōmanded,being men very diſcreete and modeſt;for many inconueniences do follow,being groſſe headed and diſordered perſons

Particular parts of the Maiſter of the ordinance.

The Captaine Generall of the Artillery, beſides the afore recited parts,ought to bee learned,and well read in hiſtories,and ſtratagems of warre;ſeene in ſpeculation of Geometrie & Mathematikes,with the practike therof;to know grounds & diſtances,waights,meaſures,qualities and the effects of the Artillery;to iudge where is the moſt conuenient part of any place to be battered;how to conuay his ordinance thither;the place where to plant them,& the planting of the ſame,for to

Sundry good conſiderations.

take any cõmoditie that might helpe the defendants: and regard that the enemy may not ſurpriſe his Ordinance; fencing them with gabbiõs, maunds, & trenches, and guarded with appointed troupes of ſhot, pikes, and ſhort weapons; hauing a reſpect firſt to diſmount the enemies Artillerie, that might in any manner annoy the campe; then to bend his batteries from two or three plantings, vpon moſt places of aduantage, as cauſe ſhall require, to ruinate their Curtine, and make good breaches: laſtly, well regarding, that before any aſſault be giuen, to cut off all flankers, and traueſſes of annoyance.

Skilfull in mynings.

He ought alſo himſelfe to be skilfull in myning, and counter-myning, and in all artificial fire workes, and ſhooting in great Ordinance, not giuing ouermuch credite vnto others, vnleſſe they be men well knowen to be of experience and skill.

Gent. Then it ſeemeth, he ſhould be a Maiſter-gunner alſo.

To be skilfull in ſhooting of great ordinance, and their particularities.

Capt. It is moſt requiſite that he be well skilled in the arte, being maiſter ouer all; the which may eaſily be attained, hauing good ſpeculation therein, annexed with ſome practiſe, knowing the names of euery particular peece, and their ſeuerall waights, lengths, bigneſſe, and boares of the cylinder, their true diſpart, the height and poize of euery their bullet, the quantitie of powder ſeruing to euery one, their diſtance at point blanke, their beſt vantage at Randon, their ſeuerall raunges, the goodneſſe and difference of powder, the ſimples and compounds thereof, the ladles, ſponges, and rammers befitting euery one, the making of all theſe, with a number of other points belonging to the arte.

Gent. What powder doth each peece require, according to his ſhot?

The quantitie of powder to ſeuerall peeces, and their bullets. Cannon, Demy-Cannon. Culuerine.

Capt. It conſiſteth much in the goodneſſe or badneſſe of the powder; for the powder being good the leſſe will ſerue, is ſooner fiered, doth better execution, & heateth not the peece ſo much. The cõmõ vſe is vnto euery double Cannõ, of 58, 64, or 70 pound Bullet, to allow in powder the $\frac{2}{3}$ of the waight of the ſhot: and to euery Demy-Cannon after the ſame rate: as for example; a Cannon of 64 pound ſhot, to allow 41 $\frac{1}{3}$ pound of powder for his due charge, and ſo of the reſt: and to euery whole Culuerine, and demy Culuerine (being peeces double fortified with mettall) to allow them in powder the $\frac{4}{5}$ of the waight of the bullet: as for example; a Culuerine of 20 pound waight bullet, to giue of good corne powder 16 pound for his charge. And vnto the Saker, Mynion, and Falcon, ſomewhat better allowance; as almoſt to the waight of their bullet. The Ladle twiſe equally filled, to all theſe abouesaid peeces, is their due charge in powder. With the artillerie and munition there is alwayes a Corps de guard, both of Infanterie & Cauallerie. The charge of the placing & ſetting of them belongeth vnto the Campmaiſter Generall, called with vs the High Marſhall of the field.

The Ladles.

The election of the officers.

The election of all the aforeſaid officers, and Gentlemen of the artillerie, Enginers, & Pioners belongeth vnto this Maiſter of the Ordinance, except the treaſurer, and Pay-maiſter; whom either the Prince or the Lord high Generall doth name & appoint: but beſides this aforeſaid guard of foot & horſe, it behoueth the Miaſter of the Ordinance to ſet other carefull and warie people both to gard them and view them, that the Ordinance be not nayled, nor the munition fiered; as did a paiſant, iſſuing out of *Verona* (being beſieged by two great armies, of the *Venetians* and *Frauncis* the French king, and *Marc Antonio Colonna* defendant within) and ſet fire to the munitions of the *Venetians* campe.

To haue wary & carefull people about the Ordinance.

The

The Captaine Generall of the Artillerie doth cauſe to bee payed all the officers, Gentlemen, Enginers, and Pioners, which go vnder his conduction: and they ought to obey him, reuerence and reſpect him as their ſuperiour, puniſhing their offences as they be committed, as well in peace as in warre: and commending and rewarding ſuch as haue valiantly and vertuouſly demeaned themſelues; ſo ſhall he be beloued, obeyed, and honored.

The Maiſter of the ordinance his care for payment of his people.

Their reſpect to him.

Gent. Truly this office is of great and honorable charge, and many buſineſſes belonging to the ſame.

Capt. So it is indeede; and therefore encommended and beſtowed vpon perſonages of great qualitie, learning, wiſedome and experience in martiall affaires: and one who is alwayes of the counſell of warre.

The Captaine Generall of the Cauallery his Election, charge, and office.

THE FIRST DIALOGVE.

Wherein is reaſoned of the Election, charge, and dutie of this officer: the compariſon of the Infanterie with the Cauallerie, with examples of both: and of certaine peeces of ſeruice to be performed with the horſe.

Gentleman.

I Pray now to the Captaine Generall of the horſe.

Capt. The Captaine Generall of the Cauallerie, is commonly choſen & appointed by the Prince; & for being a charge of ſo high authority & preheminẽce, it is alwayes encommended & beſtowed vpon a perſonage of honour & title, or ſome very honorable Gentleman, who hath had great experience & practiſe in warre: conſidering the great and waightie occaſions that commonly therein are offred to be performed and effected with the Cauallerie: and ſo he that is choſen to this charge, ought to haue in him, all, or the moſt of the good parts to be expected in a High Lord Generall of an Armie, the which may be conſidered when I come to ſpeake of that officer: referring the ſame vntill then, except ſome particular points, which may fall out in queſtions by the way.

Captaine Generall of the horſe is elected by the Prince.

To be a perſonage of honour and title.

Gent. Then ſhall we gladly heare them, & remarke them alſo; but which thinke you to be of moſt vtilitie in the warres, either the Cauallerie or Infanterie?

Capt. In mine opinion the Infanterie is to be preferred, being well inſtructed and diſciplined in their Arte.

Gent. But I haue heard the contrarie opinion, in approuing the horſe; ſaying, that they are the reputation of the Prince and armie.

Capt. I hold partly the ſame eſtimation of them: but yet I would gladly haue mine opinion excuſed: that they are not comparable to deale with reſolute foote, except vpon great and manifeſt aduantage, and in place and ground of very great fauour for them: For a reſolute ſtand of pikes, with their conuenient troupes of ſhot, will giue them ſore ſtops, and returnes with diſhonour; as hath plainly ap-

The compariſon betwixt horſe & foote.

The footemen preferred.

peared by the memorable battels of our famous kings of England, obtained with their foot cõpanies against the proud Cheualry of *France*, as at *Agincourt* field, & at sundry other their honorable battels. Yea & many times it hath bin seene, that shot companies, alone, being helped by some aduãtage, to put them to the foyle, as did the *Marquise de Pescara*, with 800 shot onely, breake, foyle, and disorder *Charles de la Noye*, then *vice Roy* of *Naples*, with all his Cauallerie at the battell of *Pauia*. Another exãple we haue of the *Countie Francisco Carmagnolla* (being Captaine Generall of *Philip Vicoũt Duke* of *Myllan* his armie) going with six thousand horse against the *Switzers*, was by them repulsed by the valour and length of their pikes, who hauing regathered his disordered troupes, considering from whence their disaduantage grew, turned head againe vpon the enemy; and he himselfe, and his companies dismounted on foote, and with their Launces in hand framed a foote squadron, and charged the enemy a fresh, and so brake, and ouerthrew them, in number aboue fifteen thousand; who by force of horse could not bee remoued: imitating herein *Marcus Valerius Coruinus*, who being Consull, & Captaine against the *Samnites* in the first *Punik* warre, and in their last battell, not able to breake on thẽ by reason of their lõg pikes wherewith they defended thẽselues, commaunded his horsemen to dismount, and on foote armed as they were, with their Lances to fight with the enemie, whereby he ouerthrew them & put them to flight; with the victorie and their baggage remaining in his hands. And againe in the battell that *Constantine Roxianus*, Captaine Generall to *Sigismund*, king of *Polonia*, had with *Basilius* the great Duke of *Muscouia*, by the riuer *Brisna*, who surmounted him much in horse, three thousand footemen onely, which he had in his armie, wan him that day the honour and victorie. Many examples more might be recited, both ancient and moderne, but I rest with these; remembring that among the ancient *Romanes*, their foot was alwayes of more estimation then their horse, holding a true opinion, that the infanterie well disciplined, is the sinew of the warre, the fortresse of the Realme, and the wals of the Citie.

Agincourt field.

Marquise de Pescara.

Battell of Pauia.

Countie Carmagnola against the Switzers.

Marcus Valerius Coruinus, in the Punike war.

Among the ancient Romanes the footemen of more estimation then the horsemẽ.

Gent. But I haue heard say, that in these warres of *Netherland*, after that the *Gran Commandador* dyed, & that the states reuolted, with determination to cleare their countrey quite of the *Spaniardes*, that *Don Alonzo de Vargas*, who had then the *Spanish* Cauallerie in charge, did great exploits therewith, in encounters which he had with the state, foote and horse.

Don Alonzo de Vargas.

Capt. It is true; But you must consider that those were old and experimented souldiers, resting vpon a valiant resolution; the others, *Bisonnios* and raw people, raised vp vpon a suddain conceipt: in which actions is maruellously to be marked the difference betweene men of experience and *Bisonnios*, the braue carriage of the one, and the bad conduction of the others; as appeared in the reencounter at *Tilmont*, and at the succouring of Captaine *Mountsdock*, being taken by them of *Mastrich*: and most notably in the sack of *Antwerpe*, where not to the number of 5000. *Spaniardes*, inclosed within their Citadell, gaue the ouerthrow and foyle, vnto aboue 16000. of the *Antwerpians*, brauely armed, encamped within their owne towne. In like sort, at the ouerthrow of *Gibleo*; where not aboue 600. horse of *Don Iohn de Austria* his troupes, defeated aboue 15000. of the states, most strange and wonderfull; onely for want of good leaders, and good conductours; the enemy espying the aduantage of their simple conduction and ouersight. But you

The difference betweene old experimented souldiers and new raw men.

At Tilmont reincounter.

Sack of Antwerp Example.

The ouerthrow of Gibleio.

you muſt vnderſtand, that in the moſt of theſe actions they were alwayes well backed with braue companies on foote: but had they bene matched with equall enemies, theſe their matters of maruell had neuer bene chronicled.

Marry I ſay, that the Cauallerie is preciſely very neceſſary for many peeces of ſeruice: as to make incurſions, to purſue the flying enemy, as in the battell where the Duke of *Saxonies* troupes were broken, and himſelfe taken neare the riuer *Albis*. And againe, to giue a ſuddein charge vpon the enemies flankes, or rereward; and to eſpie aduantage if the enemy diſaray, as before is ſaid in the battell of *Gibleio*: and againe, to ſcoute, to diſcouer, to guarde any conuoy, or to ſurpriſe any conuoy; and to relieue with money any beſieged place; as did Captaine *Arrio* thoſe that were beſieged in *Pauia*: to carrie victuals or munition for a neede and pinch to a diſtreſſed Scance: to paſſe ouer riuers, and to ſtop the furie of the currant, to render the paſſage more eaſie for the footemen; as was ſeene in the paſſing through the riuer *Albis*. And when the Emperour *Conradus* paſſed with his armie ouer the riuer *Meandrus*, and there defeated a great number of *Turkes*: & alſo to ſhock with the enemies horſe, to make *Caualgadas*, or great marches, for any ſudden ſurpriſall or *Camizado*, each horſe carrying, for neede, a footeman behind: and to gaine, with ſpeede, any ſtraight or paſſage, to ſcoure the coaſtes, to eſpie the enemies deſſeignes and courſes, to conduct, or to ſpoyle forrage; with many other peeces of ſeruice accidentall in warre.

The Cauallerie very neceſſary for many peeces of ſeruice.

Captaine Arrio at Pauia.

Conradus the Emperour paſſed the riuer Meandrus.

THE SECOND DIALOGVE.

VVherein is declared the difference, and armings of the Cauallerie; with the proper ſeruice pertaining to each difference: the partes to bee expected in ſuch as ſerue on horſebacke.

Gentleman.

HOw is your Cauallerie differenced and armed?

Capt. In theſe our dayes, the Cauallerie is moſt commonly differenced in three ſortes: Into men at Armes, or Companies of Ordinance termed by ſome; but now litle in vſe: Into demy Lances, now called Lanciers, and into ſhot on horſeback, named Hargulutiers or Hargubuziers, or Carbins, Petranels, and Piſtolliers.

The Cauallerie differenced into three ſortes.
1. *Men at armes.*
2. *Demy Lances.*
3 *Shot on horſebacke.*

The Man at Armes is armed complete, with his cuyraſſes of prooſe, his cloſe helmet with a beuer, a gorget, ſtrong pouldrons, vambraces, gauntlets & taiſſes; a ſtrong Lance well headed with ſteele, an arming ſword; and at his ſadle bow, a mace, well mounted vpon a ſtrong & couragious horſe, hauing a deepe & ſtrong ſadle, with the two cuiſſets of Piſtoll proofe, his horſe barded with a ſufficient Pectron, crinier & chieffront &c. a ſtrong bridle, double rayned, wherof one to be of wyer were not amiſſe againſt the blow of a ſword. Theſe Men at Armes were wõt to haue fiue or ſix horſes attendant vpõ each one. In this Cõpanie of Ordinance, are few, but men of qualitie & Gentles of good birth: the charge thereof is great.

The Man at Armes his arming, weapon and mounture.

Men at Armes are commonly men of title and qualitie.

Vnto euery Companie of theſe doth belong, one Trumpet, one Enſigne, one Guidon, and one Cornet: the Enſigne ouer the Men at Armes, the Cornet ouer the Lanciers, and the Guidon ouer the ſhot on horſebacke. Now by reaſon of

One trumpet, one Enſigne, one Guidon, & one Cornet.

their heauie arming, their marches are but ſlow; and not lightly marching except the campe diſlodge: and then to keepe an equall place with the foote campe, deuided into good ſquadrons vpon either ſide of the battell, with a cõuenient diſtance from the ſame: for being too neare, many inconueniences doe many times happen, eſpecially hauing charged or encountred the enemy; and driuen to retire, do hazard many times to diſaray their owne battell. Their ſeruice is commonly, eſpying aduantage to breake vpon the ſquadrons of pikes, to encounter the enemies horſe, and to relieue their owne light horſe, if by hap they bee put to a retrait. But a good ſquadron of pikes, of reſolute men, well empaled and girdled with musket, doth greatly diſcredit their auncient reputation now in theſe our dayes.

Deuided into ſquadrons.

Their partes of ſeruice.

The honourable valour of pikes footemen.

The arming of the Lanciers, is a good paire of cuirats, the fore part of Piſtoll proofe, a ſtrong cask with his open viſier, of like proofe, two l'ames of his pouldrons, two or three of his taiſſes of Piſtoll proofe alſo, the reſt, his pouldrõs, vambraces, gauntlets, taiſſes and cuiſſets, as light as may be: a ſtrong Lance well pointed, a good curtilace, and ſhort dagger, and a Piſtoll at his ſaddle bow in a caſe of leather: a ſtrõg ſaddle with his two cuiſſets for the knees; and well mounted vpon a ſtrong horſe vnbarded, and their caſſackes of the colour of the Enſigne.

The arming of the Lanciers.

His weapons.

His mounting.

I ſuppoſe theſe Lanciers, for moſt peeces of ſeruice, farre better then men at armes, eſpecially as our warres are now conducted. They ought to know how to manage well a horſe, runne a good carrier, breake ſurely a Lance, to bee ready with their arming ſword and piſtoll. Their place of march & ſeruice is before the men at armes a good diſtance, in troupes or ſquadrons, with their Cornet in the middeſt, or within the third ranke before. They ſerue to many purpoſes, and to moſt peeces of ſeruice, as well to breake on a ſquadron of pikes, firſt ſhaken or diſaiayed by ſhot, as to encounter the enemies horſe, to backe & ſuccour the Petranels and Hargulutiers being diſtreſſed, to conduct their owne, and to detruſſe the enemies conuoy in companie with the Carbines and other ſhot, to ſurpriſe the enemies troupes vpon any aduantage ſpied: and in generall, good for moſt peeces of ſeruice fit for horſe; whereunto the men at armes are both too heauie and vnapt.

Lanciers, for many peeces of ſeruice farre better then men at armes.

The partes of a Lancier.

Their place of march.

Their Cornet.

Their partes of ſeruice.

The Petranell and Piſtolier is armed with a good paire of Cuyrats of piſtoll proofe, and open Burganet, as is the Lancier, a paire of well arming pouldrons, one gauntlet for the bridle hand, no vambraces, but in ſteede thereof ſome other eaſie arming, and lighter mounted then the Lancier is, with a good ſaddle and bridle according; then weaponed with a good ſhort ſword and dagger, a Petranell peece, which is with a ſnap-hance, or, one long piſtoll, as the French now vſe thẽ, faſtened in a caſe of leather, at the ſaddlebow, or elſe a paire of piſtols in one caſe as do the *Ruytters*; their ſeruice is (as before of the Lanciers) in moſt peeces of nimble ſeruice; and are of moſt annoyance vnto the pikes, being not well guarded with ſhot. Their place of march is next before the Lanciers, and ſo in their ſeruices, by whom they are ſeconded, marching in troupes like ſleeues of ſhot, ſeconding one another in order. They muſt bee skilfull to manage their horſe; to learne him to trot, to ſtop well, to wheele readily, for their actions are not vpon the ſpurre, as the Lanciers are, but to skirmiſh brauely vpon the face of the enemy, diſcharging, & wheeling about, one troupe ſeconding another; and to breake

The Petranell and Piſtolier his arming.

His weapon.

Their ſeruice.

Their place of march.

The partes of the Piſtolier.

in

in alſo if occaſion be offered. They are very good againſt foote ſhot, if they be not friended with hedge, ditch, or ſome ſuch place of aduantage: in their middle troupes is the Guidon placed.

The place of their guidon.

Finally the Hargulutiers, Carbines, or Harguburiers on horſebacke not armed at all, or elſe with light arming: and they haue a good Hargubuze, or a Petranell, or horſemans peece, as ſome call it, with a good ſhort ſword and dagger well girt vnto him, mounted vpon a pretie light horſe, ſuch as be our Northerne nagges, befitted with a ſaddle, bridle and furniture correſpondent, with a neceſſarie flaske and touch-boxe for his peece, and a purſe at his girdle, with bullets, and his other neceſſaries. Theſe and the other ſhot on horſebacke do ſerue principally for great *Caualgadas*, they ſerue to watch, to ward, to diſcouer, to ſcoute, to forrage, to skirmiſh, for *Ambuſcados*, for gaining of a ſtraight, hilles, and ground of aduantage, to be put for a forlorne Sentinell, to diſcouer the enemies proceedings, to ſpoyle forrages, and to aſſaile troupes at their lodgings, either in villages, ſtraights, or fields; and if occaſion ſerue, they may alight and ſerue on foote, either to aſſaile a ſtraight, to ſurpriſe a barrier, to performe an *Ambuſcado*, and in ſuch points of ſudden ſeruice, doe the dutie of foote ſhot, wherein they may do many good peeces of ſeruice to the enemies annoyance: who, if the enemy bring ſhot to diſplace them, they may diſlodge, if they find the party vnequall, and betake them to their horſe. And in good conductions they are alwayes ſeconded with armed Piſtols or Lances: for they are not lightly turned out to any peece of ſeruice vpon armed men, without being accompanied with Lances, or cuyrats on horſebacke, I meane armed petranels or piſtoliers. They ought to bee very nimble both to mount on horſebacke, and to diſmount; to manage their horſe euery manner of way; to be very ready and quicke with their peece, diſcharging on euery part, as cauſe ſhall require, inuring their horſe both to the crack and fire; and learne to performe three actes at one inſtant, his bridle hand, his peece, and his ſpurres: wherein conſiſteth fine skill, with viuacitie of ſpirite, attained by often vſe and practiſe. For they are the forlorne skirmiſhers on horſebacke, who hauing performed their dutie doe retire behind their Lanciers and armed piſtols. And it is not inough to know how to ride a horſe well, and vnpractiſed in his peece; neither is it inough to bee skilfull in his peece, and ignorant in his horſe: but the one muſt bee coupled with the other to make a perfect Hargulutier. For the fierie weapons being in hands of vnexpert men, either on horſebacke or foot, is of all other the moſt daungerous to themſelues; and being in the hands of perfect ſouldiers, is a weapon of moſt execution and aduantage. To conclude, all theſe aforeſaid mounted people, ought to be ſeene & haue ſome skill in diſeaſes of horſes, and to know remedies for the ſame: and if neede require, to ſet a ſhoe alſo. All their baggage doth paſſe with the munition and baggage of the campe.

The ſhot on horſe backe, his furniture and weapon.

His mounting.

Their partes of ſeruice.

They may alight on foote, and doe the dutie of foote ſhot.

In good conductions, alwayes ſeconded with the Piſtoliers, or Lanciers.

Their partes incident.

To performe 3. actes at one inſtant.

He ought to be a good horſeman and a good ſhot.

The fierie weapō in the vnskilfull is daungerous to themſelues.

Generall partes for horſemen.

Gent. How are theſe troupes ſorted?

Capt. The diſcipline now vſed doth require vnto euery fiue hundred Lances and armed Cuyrats, one hundred, or one hundred and fiftie of theſe aforeſayd light horſe.

The due ſortmēt of horſemen.

Gent. What courſe doth this Generall of the horſe take with his troupes, in field, campe or garriſon?

Capt. Firſt he taketh a roll of the bands committed to his charge (euen as doth

The Generall of the horſemen, his courſes taken in field, campe, or garriſon.

a Colonell of Infanterie with his) with the names of their Captaines, viewing well their mounting and arming, to ſee it be ſufficient: and his ſeuerall ſortes of horſemen diſpoſed in ſeuerall troupes, as I ſayd before; in the morning when the trumpet ſoundeth to make ready the horſe, hee ſhall repaire to the Lord Generals tent, to know his pleaſure: the which being knowne, he bringeth forth the Generals Enſigne or ſtandard, whereunto his Captaines doe repaire with their companies in a readineſſe, whom he ranketh in good troupes, each ſort by them ſelues, with their Cornets and Guidons in middeſt of their troupes. And as occaſion ſhall be offered, to ſend them abroad, he ſhall appoint ſuch as ſhall watch, ſcoute and diſcouer, and others to relieue them againe, committing them to the Scout-maiſter.

When the high Marſhall goeth to view the ground.

When the Camp-maiſter Generall goeth to view the ground to encampe vpon, the Generall of the horſe ſendeth ſufficient troupes to attend vpon him.

When the armie entreth into the campe, his dutie what to do.

When the armie entreth into the campe, he ſhall with all his Cauallerie, remaine mounted in the field, vntill the Infanterie be all encamped, & then to enter orderly with his horſe troupes, and repaire vnto their allodgements, vſing therein indifferencie to each band in their kinde; giuing order vnto his Scoutes that they come not out of the field, vntill the trumpets ſound to the watch at night, and Corps de guardes ſet, and Sentinels brought forth of the campe and placed at their poſtes.

To guarde the forragers.

He muſt appoint horſes to attend on the Forragers, to guard and defend them till they returne with their forrage.

To guarde conuoies.

He muſt alſo appoint a conuenient conuoy of horſe to guard the victuallers of the campe, as well from the enemy, as from vnruly ſouldiers.

In skirmiſhes & encounters one troupe to ſecond another.

In the order of his skirmiſhes, encounters, and charges, he muſt giue order, one troupe to ſecond another, that if the firſt bee repulſed, being well ſeconded, they may haue time to regather themſelues into order againe, ſparing his armed mẽ frõ ſuch skirmiſhes, & his Lãciers what he may, reſeruing them to encounter with their equals, or breake vpon the enemies battell, as occaſion is offered: but alwayes hauing a carefull regard, that his bands charge not too neare the front of their owne foote ſquadrons, for feare of inconuenience that might enſue; as it fell out at the ouerthrow of *Gibleio*: but rather eſpying what aduantage he may, to charge the enemy in flanke or in rereward. For it is a great point of a man of warre to finde the occaſion, and to take it when it comes.

A good Caueat.

To eſpie aduantages, and to take them.

Gent. But hath he the chiefe ordering of the ſquadrons of horſe in battell, in march, and in allodgement?

The chiefe ordering of the ſquadrons.

Capt. No, not the chiefe in thoſe points, for that belongeth to the Lord high Marſhall, or Camp-maiſter Generall, whoſe office is herein, as the Sergeant Maior Generall with foote companies.

The Campe-maiſter Generall or high Marſhall, his Election, charge, and office.

THE FIRST DIALOGVE.

Wherein is ſet foorth the parts to be expected in a Lord high Marshall: his authoritie in an Army, and in the adminiſtration of iuſtice, both ciuill, and criminall: what officers attend vpon him: with certaine Martiall orders, and lawes, &c.

Captaine.

THe office of the Campe-maiſter Generall, or Lord high Marſhall, the Prince with great conſideration and aduiſe, doth encharge vpon a perſonage of great prudence and induſtrie, and of great experience and skill in martiall cauſes; for that the adminiſtration of iuſtice, both ciuill and criminall, belongeth vnto his charge: and alſo the encamping of the Army, and the fortifying the ſame with trenches, Corps de guards, Sentinels, & other military appertinances; and doth aſſure with good guards and ſcoutes all ſuch as bring any maner of victuals vnto the campe, ſetting a rate and price vpon all ſuch vendible victuall. And in the day of battell he doth preceede, and principally aſſiſt with all the Sergeant Maiors of the Army, to the diſpoſing, ordering, & framing of all the battels, ſquadrons, & troupes, both of horſe and foote appointed to fight, ordaining and commanding what therein is to be done and executed: vnto whom they and all the Colonels ought to be obedient and to follow.

The high Marſhall of the field, his parts and dutie.

His ſuperintendencie in the day of battell.

Gent. It ſeemeth to me by that which you haue ſaid, that in the Lord high Marſhall conſiſteth the moſt importancy of all the directions, and gouernement of the campe.

Capt. So doth it indeede: and therefore it much behoueth, that he which is to performe this functiõ, be a perſõ ſingularly wel skilled in all offices of war, & one who hath paſſed them through euery office himſelfe by degrees, (if ſuch a one might be found) the better to know what toucheth euery one in particular.

Skilfull in all offices of warre.

Gent. What authority and power hath he in the adminiſtration of iuſtice?

Capt. Such (as I told you before) as haue the Colonels: to command, to apprehend, to diſcharge, and to puniſh both corporally, and with paine of death, all delictes and caſes, as ſhall deſerue ſuch ſemblable puniſhment; and on thoſe that ſhall commit any thing againſt the *bandos*, orders, and commands of the Lord high Generall, and other ſuperiour officers: and hath the chiefe hearing and determining of all ciuill cauſes and queſtions ariſing among the people of warre; and of the appellations which are interpoſed from of the Sentences that were pronounced by the Colonels, as high and ſupreame Iuſticer of all the Army.

His authority in the ad miniſtration of iuſtice.

Gent. What officers hath the Campe-maiſter General, or Lord high Marſhal for the execution of iuſtice?

Capt Among the Spaniardes, he hath an Auditor, with his two Clarkes, his

The officers to the high Marſhall.

Alguazils, his iaylor, & executioner, & his Prouoſt Marſhal ouer the whole cãpe; with 20 or 30 Gentlemen to accompany him, and a Beadle to puniſh *Infraganti* the offences committed againſt the *Bandos*, lawes, and orders of the Campe.

Gent. What orders and lawes are theſe?

Military lawes and orders.

Capt. The orders are many, and of diuerſe nations vſed diuerſly, made by the high Generall and his Counſell of warre: but I take for military lawes all thoſe which doe charge, binde, and commaunde the ſouldier vpon paine of life, to liue honeſtly, to annoy no perſon without the leaue of his Generall or ſuperiour Commander; that he obſerue fidelity vnto his Prince, that he vſe his armes in their due nature and kind; and in ſumme, that he obey his ſuperiour officers, vnder whoſe charge hee ſweareth to ſerue faithfully, and vnto whom hee is ſouldier. The which points and articles are ſo generall, and do comprehend ſo many within them, that it were needefull to recite ſome part of them particularly; and chiefly ſuch as condemne vnto death: whereof ſuch as I can remember & gather together, I will declare vnto you.

Martiall lawes.

1 Firſt, whoſoeuer committeth or conſpireth any treaſon againſt his Prince or Generall, in what ſort ſoeuer.

2 And he that giueth any counſell, ſuccour or ayde vnto his Princes enemies.

3 Item, whoſoeuer vſeth any conference with the enemy without expreſſe licence from his Generall, or from one of the other two high Commanders.

4 Item, whoſoeuer reuealeth their counſell and ſecrets vnto the enemy; yea, or vnto any other of their own, chiefly if by the diſcouering thereof, any miſchiefe might enſue.

5 Item, who ſo ſendeth vnto the enemy either letter or meſſage, without licence of the Generall, or his Lieutenant.

6 Item, whoſoeuer giueth not preſent aduertiſement vnto his ſuperiour, of what ſoeuer he ſhall vnderſtand and know, concerning the honour and benefit of his Prince, or his Princes hinderance.

7 Item, whoſoeuer runneth from his owne campe, or retireth to the enemy, or is receiued vnder their defence and guard.

8 Item, whoſoeuer being taken by the enemy, and eſcapeth not, if conueniently he might, except he hath giuen his faith to be true priſoner, the which he ought to obſerue and hold.

9 Item, whoſoeuer rendreth vp vnto the enemy any towne, fort, or fortreſſe committed to his cuſtody, except he be more then conſtrained thereunto: and hauing not performed therein the part of a good ſouldier, and an honeſt man.

10 Item, whoſoeuer lifteth vp his hand againſt the perſon of his ſuperiour, or againſt a Colonell, or other officer, with intent to offend him.

11 Item, whoſoeuer putteth his hand vpon any head member or officer of any regiment, or band whatſoeuer, eſpecially when the ſaid Commanders, or other officer be in the execution of their office, except that the aboue-ſayd do wonderfully outrage and abuſe him, and ſtrike, and beate him without good cauſe, and that to defend his life, being thereby in manifeſt perill.

12 Item whoſoeuer ſhall kill his ſouldier vpon his owne fantaſie, without iuſt cauſe, or kill any other of the Campe, otherwiſe then in his owne defence.

13 Item, who ſoeuer ſhall raiſe any mutinie, or diſobey the ſounds of trumpet or

or Drum in time of ſeruice, eſpecially when they are made vpon paine of death.

14 Item, who ſoeuer ſhall breake truce, or peace, not hauing commiſſion ſo to do, from him that hath authoritie for the ſame.

15 Item, who ſoeuer ſhall wilfully ſet fire in any houſe, or in any Church, or in any other thing, without commaundement of his Colonell.

16 Item, who ſoeuer ſhall rauiſh any woman or maide perforce.

17 Item, who ſoeuer ſhall ſpoile anie Church without his Generals licence.

18 Item, who ſoeuer ſhall enroll himſelfe in two bands at once, or paſſe twiſe in one Muſter, or paſſe from Band to Band without licence of his chiefe Officers; for the Captaine hath no ſuch authoritie.

19 Item, what Captaine ſoeuer ſhall entertaine any ſoldier departing from anie other Band without leaue, or ſhall entice or procure any ſouldier ſo to do.

20 Item, who ſoeuer ſhall not follow his Enſigne whereſocuer it paſſeth; or any other guide being commaunded thereunto.

21 Item, whoſoeuer ſhall abandon his Enſigne, or forſake the place he is to keepe, being in battell, without commaundement ſo to do.

22 Item, whoſoeuer ſhall not be found in the place where he was appointed and ſet, but ſhall abandon the ſame.

23 Item, whoſoeuer ſhall reueale the Watch-word vnto the enemy, or vnto any other, whereby any daunger might enſue vnto the campe.

24 Item, whoſoeuer ſhall be found ſleeping at his poſt or Sentinell.

25 Item, whoſoeuer ſhall abandon the place where he ſhall be ſet by his Sergeant or other officer, whether it be in watch, ward, Sentinell, or ſcoute, or in any other part, except he be remoued by him which there placed him, or other that he knoweth hath the charge and authoritie thereof.

26 Item, whoſoeuer being at Scoute or Sentinell, within or without the cãpe, and not found in his poſt, in caſe the enemy ſhould aſſaile the Campe, and notice not giuen thereof through his default and negligence.

27 Itẽ, whoſoeuer is appointed to defend a breach, battery, trench, or ſtraight, and doth quite abandon the ſame, although conſtrained by the enemie.

28 Item, whoſoeuer, at the entrie of any Citie, Town or Fort, taken by force of armes, ſhall fall to the ſacke and ſpoile, and ſhall not follow his Colours, whither ſoeuer it bendeth, without forſaking it at any time, vntill the victorie be fully atchieued, and the Generall commaundeth vnto the ſacke by ſound of Drumme or Trumpet; the which being not proclaimed and licenced, euery one ought to withhold their hands, and refraine from falling to the ſpoile and pillage: vpon the like paine.

29 Item, whoſoeuer ſhall not do his endeuour and beſt to regaine and recouer his Colours, if by hap it fall into the enemies hands; and when it cannot be recouered, it is needfull to vſe ſome rigor vpon ſuch ſouldiers, as cowardly ſuffered the ſame to be ſo loſt.

30 Item, whoſoeuer ſhall flie from the Battell, being there ranked and placed, or march ſlow or fearefully, being vpon point to fight; or ſhew any other baſe cowardiſe in what bad ſort ſoeuer.

31 Item, whoſoeuer ſhall faine himſelf ſicke vpon the point of fight, or ſlippe a ſide when any action is to be performed.

32 Item, whoſoeuer ſhall ſee his Commander or Superiour officer in danger of the enemy, and ſhall not preſently aſſiſt & ſuccour him to the beſt of his power.

33 Item, whoſoeuer ſhall rifle or diſpoile any victualler (except of the enemy) or any which bringeth any munitions or prouiſions for the campe.

34 Item, whoſoeuer ſhall diſualedge or ſpoile any of the Princes friends, or rob, or ſteale any thing, eſpecially armes and horſes.

35 Item, whoſoeuer ſhall ranſacke, rifle, or ill entreat the people of the countrey where the warre is made, either in goods or perſon, except it be proclamed rebell to the Prince.

36 Item, whoſoeuer is found diſgarniſhed of his Armes, wherewithall he firſt entred into the roll, chiefly if he hath loſt the ſame in gaming or by cowardly flying away, and abandoning his weapon: or by any other ſuch baſe default of his: and the ſame law is to be vnderſtood of any horſeman that ſhall play away his horſe or furniture; or looſe the ſame through vilty or negligence, to be conſtrained to reſtore the like, or the value, as is accuſtomed.

37 Item, whoſoeuer ſhal ſtragle, wãder, or range frõ the circuit of his quarter, or regiment aboue a 100 paſes, without licence of one of his Superiour officers.

38 Item, whoſoeuer ſhall receiue any ſtranger or any other ſuſpected perſon into his lodging or quarter, without hauing firſt preſented him before his General or Superiour, and ſhall haue licence of his Superiour ſo to do.

39 Item, whoſoeuer ſhall raiſe any queſtion, brable, or braule in the watch, or *Ambuſcado*, or in ſcoute, or Sentinel, or in any other effect, where ſilence, ſecrecy, and couert is to be required.

40 Item, whoſoeuer ſhall be found firſt to iniury any other either in word or deede, for that quarrels do ſpring from iniuries, and from quarrels and braules, great diſorders in a campe.

41 Item, whoſoeuer ſhall run to any braule or fray, furniſhed with any other armes, more then his ſword and dagger, except he be a Captaine, or any other officer in the campe.

42 Item, whoſoeuer ſhall offer himſelfe to reuenge any iniury, either preſently offred, or of long time before, rather by any other way, then by courſe of order and reaſon: yet is it not hereby forbidden, but that the Combat may be demanded, of body to body, if the difference may not otherwiſe be accommodated: which is a point reſerued only to the Generall.

43 Item, whoſoeuer ſhall offer any thruſt, or blow, or puſh againſt his aduerſary, with whom he hath debate, either in ieſt or earneſt, or in any other ſort, if an other cry *Hola*, or hold, with intent to de part them, except it be in Combat, where no man ſhall be ſo hardy as ſo to cry or ſay, were it not the Generall himſelfe.

44 Item, whoſoeuer ſhall take away the mony that another hath rightly won in game, or put his hand thereupon without leaue of him, who ſo hath gained it. But it ſeemeth good vnto me, to the end to do well, and to auoide, and withſtand many inconueniences growing by game, vtterly to forbid the ſame.

45 Item whoſoeuer ſhall vſe any ſhifting, or coſenage, or packing, or any maner of falſe play, or any maner of falſe dice, whereby any may be defrauded.

46 Item, whoſoeuer ſhall put himſelf to paſſe on before the battell, whether it be to arriue firſt at his lodging, or to any other ſuch effect, or ſhall disband and range from one place to another, whileſt the battell or army doth march.

47 Item, whoſoeuer ſhall ſet a tallage, rate, or ranſome vpon his hoſt where he doth lodge, or other, being no priſoner in due courſe of warre: and being taken priſoner by iuſt courſe of warre, that then ſuch ranſome ſhall not exceed the Capitulation made and agreed vpon by the Commanders of the two Armies, if any ſuch be made: and if not, that then it be done with as much fauour as may be.

48 Item, whoſoeuer ſhall enter into any Campe, Caſtell, or Fort of warre, otherwiſe then by the ordinary ports and iſſues, or ſhall paſſe out, either ouer, or vnder the wals, it is a capitall offence.

49 Item, whoſoeuer ſhall prolong the retrait after that the drumme or trumpet hath ſounded the ſame: whether it be at any ſallies made out of any city or fortreſſe, or in skirmiſh, or in any other encounter.

50 Item, whoſoeuer ſpeaketh lowd, or maketh any noiſe, or rumour, whileſt he is in skirmiſh, battell, or otherwiſe, where ſilence is to be vſed, except they be Cõmanders and Officers.

51 Itẽ, whoſoeuer ſhal paſſe one whole day, without carying or vſing his aſſigned weapõ, ſome part therof; except he be otherwiſe imployed in the Princes ſeruice.

52 Item, whoſoeuer ſhall do any thing whatſoeuer, or in whatſoeuer maner, that might preiudice his Princes ſeruice, or be hurtfull to his fellowes.

53 Item, whoſoeuer ſhall blaſpheme the name of the eternall God, by vile othes, or otherwiſe.

Finally many other lawes and articles are to be inſerted, as the Generall and Commanders ſhall deuiſe and appoint, according to the cauſes and occurrants: both the which, and all theſe, I would wiſh to be written in ſome faire table, and fixed faſt at the entrance of euery Coronels pauillion, for euery mã to view, reade, and vnderſtand, beſides the open proclaming of the ſame. All the which, and many others, are to be commanded to be obſerued and kept, to the end that good order and reformation be had in the Camp; the which without the ſame, wold ſoone grow to confuſion.

All martiall lawes to be written in tables, and fixed vp for euery man to reade.

An army without good orders ſoone growes to confuſion.

Gent. Doubtleſſe (Captaine) he which is choſen to be *Maeſter del Campo* Generall, or Lord high Marſhall of the field, ought to be a man of great wit, experience, grauity, and knowledge, ſith ſo many things do concerne him to direct, gouerne, and adminiſter: and principally the allodgeing or encamping of the Army; the which ſeemeth to be a matter of great importance and skill.

Capt. No greater matter of charge that I know of, in the warre; for beſides that it requireth great practiſe and experience to diſcerne what part is fitteſt for the Cauallerie, and what place for the Infanterie, and in what quarters the Artillery ought to be planted, & in what parts the Corps de guard, ſcouts, & Sentinels: yet without compariſon, it behoueth him much more to haue the reaſon, iudgemẽt, & skill to diſcerne whether the ſituatiõ hath the parts and cõmodities to be required; & whether it be pitcht in a place fit & conuenient to defend thẽ frõ the attempts of the enemy: & that the prouiſions & victuals may ſafely paſſe & come vnto the campe, with a number of ſuch other points; to effect the which it is very important and neceſſary, that he be wel skilled and practiſed in the country where he warreth, & that he be very wel ſeene & skilfull in the Geography thereof, hauing the ſame perfectly drawne in plats and Mappes, with their Cities, Townes, villages, forts, fortreſſes, farmes, and Countrie houſes, and the diſtance frõ one to

The encamping of an Army, a thing of great importance.

Great conſiderations.

Situation and grounds a principall point.

Skilfull in the Countrie.

Well ſeene in Geography.

Plats and Maps.

Parts to be considered.

the other; and the woods, hils, vallies, plaines, riuers, brookes, ſprings, fountaines, lakes, fennes, & Maris; & whether the ground be ſandy, ſtony, or claie, dry, or wet, with all other particularities thereunto appertaining.

THE SECOND DIALOGVE.

Wherin is entreated, what officers are attendant vpon the Camp-maiſter, when he goeth to encampe; the care to be had therein; the orders that he appointeth in ſetting the Corps de guards, Sentinels, and ſcouts; and placing the Artillerie and munition: the ſure conuoying of the camp-victualers: and their duties for the ſame, &c.

Gentleman.

I Pray, what order doth the high Marſhall take to encampe the whole Army, both of horſe and foote, with their ſeuerall quarters and alodgements?

Capt. I haue not now the leaſure to demonſtrate the ſame particularly vnto you, but reſeruing it vntill the end of theſe diſcourſes: where I will ſhew you the beſt manner I haue learned from any encamper.

Gent. Well, vntill then be it; but in the meane time, what officers hath the Campe-maiſter Generall attendant on him, when hee goeth to encampe the Army?

Officers attendant vpon the high Marſhall.

Capt. All the furriels maiors, or chiefe Harbingers of the Tertics of the Infantery, and the quarter maiſters of all the Cauallery, and the ordinary Harbingers of all the companies of euery nation (if there be of more nations then one) and a ſufficient guard, both of horſe and foote about him, according as the enemy is to be ſuſpected. Moreouer he carieth with him good and skilfull guides, and men well acquainted with the countrey, by whoſe opinions and intelligences (according to the ſeat & diſpoſition) he formeth the encampement, & ſetteth euery thing in his due proportion & order, with al neceſſary aduertiſements & regards: for it hath happened many times, that an army being encamped vpon a ſeat of great ſtrength and force, and not to be aſſaulted, hath notwithſtanding bin conſtrained to diſlodge, by reaſon that their victuals, and other commodities haue bin disbarred and cut off; and ſo enforced of neceſſitie to come to the fact of armes and battell; as it ſucceded vnto *Iames* king of *Scots*, with our anceſtours at *Floddon* field. And in the warres of *Germany*, did *Charles* the fift, with nothing more aſſure himſelfe (before the arriuing of the bands of *Flanders*, and companies of infantery of *Countie de Bury*) as in knowing how to allodge his campe commodious and ſafe; as was to bee ſeene at *Ingolſtat*, and in other alodgements: and with no other thing did he more diſſolue, breake, and ſcarter the deſſeignes and forces of his enemies, as with cutting from them their victuals and commodities: cauſing them by ſuch meanes to diſlodge.

Good and skilfull guides.

Strong encampements, if commodities be cut off, not much available.

Iames king of Scots at Floddon field.

Charles the fift

To alodge a camp commodiouſly, is a point of great skill.

Gent. What order doth he appoint in placing his Corps de guard, after that the Army be encamped.

Capt. All

Capt. All the Sergeant Maiors of all the regiments do presently repaire vnto the high Marshall, who after he hath well viewed the posts of the Artillery, and munitions, & all the other quarters, & places of the campe, he appointeth out vnto euery one, as occasion shall require, with how many ensignes of their regiments they are to serue, and in what post or quarter, and then the manner how to place, and set their Corps de guards, scouts, and Sentinels, in such sort that no man may possible either enter in, or sallie out of the camp, with o u t being by them discouered, and seene: and all other reparations, strengths, and defences, as are conuenient to be made: for the good security, guard, and safety of the Campe: all the which thinges, these officers are to put in execution, & to effect with all possible speede, care, and diligence.

The order in placing the Corps de guard, the army being encamped.

Gent. It seemeth that you say, that the assuring and guarding of the victualers, doth touch the Campe-maister Generall, and I haue vnderstood that the prouiding of them, and guarding of them did concerne the Commissary Generall of the hoste.

The commissary Generall.

Capt. The prouisions which are made by order of the Prince for the munitions and necessaries of the campe (doe indeede) concerne the commissary Generall, the which are neuer distributed but at times of great need, when the campe-victualers and marchants, either for feare of the enemy, or for any other occasions, do leaue their comming to the campe, and the furnishing thereof. Now vnto these vianders, and marchants, doth the Lord Marshall assure and guard with good scoutes and conuoies vpon their wayes, if neede require it; and with guard in the market place, for the safegarde of their wares and victualls: and for the same doe they euery one pay vnto him euery satterday, sixe pence for euery standing: & by duty he hath the tongues of all the beasts they slaughter: and it concerneth him to rate the prices, and set the measures and waights of all the things there bought and solde, and to this effect hee hath sublistants and ministers to performe their office faithfully herein.

The vianders & marchants assured with guards.

Their duties for the same.

Sublistants, and vnder officers.

Gent. Are there yet any other points concerning a Campe-maister Generall?

Capt. There are yet many other points concerning his office; and of euery seuerall nation seuerally vsed: but I haue shewed you what I am able to speake thereof.

THE THIRD DIALOGVE.

Wherein is declared sundry considerations to be had in marching of an Army; especially the enemies Army being neare at hand: the considerations and regardes to the seates and groundes where you march: seeking the aduantage to shunne the fact of battell; if your strengths be not sufficient.

Gentleman.

IF there be nothing else to be spoken, but onely of the sure encamping of an Army, whereof you spake before, referring the order thereof vntill the end of these discourses: yet, I pray now (if conueniently you may) declare the same somewhat particularly vnto vs: for we are desirous to heare the most points of your Martiall orders; happely for

Good to know Martiall courses for God knoweth what would may fall out.

our inſtructions: for God knoweth what world may fall out yet ere we dye.

Capt. Well (Gentlemen) ſith you do ſtill egge and draw me on, with your curious demaundes, I will ſhew you (the beſt I can) the orders obſerued by the beſt *Italian* and *Spanish* Encampers.

Briefe repetition. You know that I haue ſhewed you before, of the generall and particular parts of a ſouldier, their ſeuerall offices, euen frõ the Caporall vnto his Camp-maiſter generall: the number of a band, their due ſortment & difference of weapons, and their ſeuerall vſes: the orders of training, marching, and embattailling in ſundry manners now moſt in vſe; the ſeuerall parts and dutie of euery officer in degree, with a number of other points which now I remember not. Now laſtly to your demaund touching the marching and allodgement of a campe, I ſay: That when an Armie marcheth neare vnto the enemies Army, it is needfull that there be had many and great conſiderations: as firſt when the one Armie is not of equall force vnto the other, or when one is not diſpoſed to come to the fact of battell, for not to put, by one onely battell into the hands of fortune all a mans habilitie & whole reſt in fine, as many miſaduiſed men haue done; therefore to prolong time, and to ſhunne the doubtfull fact of armes, it were needfull to make choiſe to march (if poſſible you may) through mountaine groundes and hillie, and with ſuch aduantage of ſeate and ground, that the enemy may not with any reaſon of aduantage, aſſault you: But when this may not be yet eſchued, at the leaſt it is to bee procured to be done to the beſt aduantages, and (as it were) with a certaine hope of victory; the which may partly bee performed when you know how to profit your ſelfe with the aduantage that the ſituation will affoord. And in your marching, I would wiſh you to ſend ſome part of your light horſe ſo neare vnto the enemy, as continually you haue notice of all their orders and courſes. True it is, that when you are in a countrey, where this aduantage of hils is not to be found, and muſt of neceſſitie march through plaines and champaine fields, and haue the enemy neare at hand, it were then very hard to ſhunne and auoide battell, the which I would rather wiſh to be done, then otherwiſe, eſpecially if your Army do ſurmount your enemy in Cauallerie, for in ſuch caſes the battell is not to be refuſed, your ſtrength conſiſting moſt in horſe, the which by good conduction, giueth a great part to the victory.

Many and great conſiderations in the marching of an Armie.

To march vpon grounds of aduantage, as did Fabius Maximus.

Charles the fift.

This manner of marching vpon grounds of aduantage, we reade antiquitie to haue vſed; as did *Fabius Maximus*, when he encamped a long time with the *Romane* Armie, againſt the conquerour *Hanniball*: & in our time, as did *Charles* the fift in *Germanie*, againſt the Proteſtants Army: both the which, by reaſon of the ſituations and ſeates, did many times encampe and lodge with their armies, not diſtant one from the other, aboue a Culuerine ſhot: the which might poſſible be, by reaſon of the hilles and mountaine ſeates abounding in them places. But this is ſeldome ſeene in the plaines, and champain grounds; in the which it is needfull for him that ſhunneth the battell, to march and paſſe, at the leaſt, eight or ten myles diſtant from the enemy: and muſt thinke to fortifie at euery allodgement, in ſuch ſort and manner, that neither horſe nor foote, in any array of battell, may not, but with great difficultie, charge or enter vpon you; the which is ſufficient with a campall fortification, or running campe, as ſome terme it; and chiefly becauſe it ought to be done with great ſpeede and diligence, the which encamping

Conſiderations to be had, the Army marching in plaines & champaines.

ping, when it ſhall ſeeme you good to continue, may bee reduced into ſuch ſtrength, as might ſeeme ſufficient.

And in the marching which the armie ſhall make through plaines and champain fieldes, when it commeth to paſſe to haue either any litle riuer, wood, or groue to couer one flanke of the campe, all diligence is to bee vſed to gaine ſuch ſayd aduantage: for it will be a matter of great importance. Alwayes hauing a regard, that the artillerie, munition, and other impediments doe alwayes paſſe on the contrary ſide from the enemy: and alſo that the ſquadrons of men at armes, & Lanciers do flanke the arrayes and battallions next toward the enemy, in ſort and maner conuenient. And moreouer a laudable cuſtome it is, to deuide the campe into three ſquadrons or battels; that is, in vantguard, battell and rereward, and euery day to change the point, making the vantguard, battell; and the battell rereward; and the rereward, vantguard: and that euery one of theſe partes may haue their due proportions and numbers of Cauallerie and ſhot, diſtinguiſhed in their conuenient places; aduertiſing with great diligence and care, that there bee not mingled any vnprofitable people among the Ordinances and ſquadrons of the Infanterie; and that euery battell be placed in their due appointed places and diſtances, vnder their Enſignes and colours; in ſuch ſort that all the troupes of Cauallerie be quite cleared of vnprofitable horſes, and other impediments, wherein the *Germaines* horſemen do keepe great order, care, and diligence; very neceſſarie to be imitated. It is a very good cuſtome beſides, that part of the light horſe be continually abroad at diſcouery & ſcout; and to watch after euery action that the enemies Armie doth, that you may bee alwayes aduertiſed thereof: ſo that, if occaſion bee, you may haue time, ſpace, and commoditie to prepare to the encounter and battell. Touching the order of marching the campe, there can bee no particular rules ſet downe, more then I haue before ſpoken of in the third and fourth booke (where I haue entreated of the framing of ſquadrons, marching an Armie, and of deuiding the ſame into *Maniples*, comming vnto any ſtraight paſſage or narrow wayes) becauſe it muſt be accommodated according to the ſituation and qualitie of the countrey wherein you march.

Points of aduantage.

Men at armes & Lanciers to flake the arrayes.

The marching armie deuided into vantguard, battell and rereward.

Their orders.

Vnprofitable people to be ſhifted out of the ſquadrons.

Vnprofitable horſes and impediments cleared.

Part of the light horſes to be continually abroad.

Referring to the third and fourth booke.

Let vs now therefore paſſe on to ſpeake of the allodgement of a campe; and of the ſeates, and the forme, and of the greatneſſe, and of the commodities, and of the fortifying the ſame; and of the orders to be therein obſerued. And firſt touching the ſituation, I ſay; that being in a plaine or champain field, farre diſtant from mounts and hilles, it is then neceſſary to haue either riuers, or ſuch quãtitie of waters, as may commodiouſly ſerue the whole campe, both horſe & foote: with aduiſement that there may be had, from the next adioyning woods, timber of all ſortes, for the vſe and needes of the campe: the like conſideration is alſo to bee had for forrage for the horſes, as things not to be carried alwayes after a campe: and to do it (when theſe commodities may bee had) with ſuch ſure fortifications, that the enemy may not annoy you.

Partes to be conſidered in the allodgement of a campe.

The ſituation, in plaines.

Conſiderations.

The circuite & greatneſſe of the campe, ought not to be ſuch, that might hinder, in any occaſion offered, to ſuccour, keepe and defend the ſame, as is conuenient and needfull; neither yet that it be of ſuch ſtraightneſſe, and narrowneſſe, that the Armie cannot haue all his commodities, eaſes, and places neceſſarie to frame their ſquadrons, and ſet themſelues in battell ray: and common places for

The circuit of the campe.

victuallers, pioners, and others following the campe.

The formes. And touching the forme, it ſhall be ſuch and in ſuch order, as ſhall appeare by the plats and draughtes; accommodating the ſame vnto the ſituations and groundes: as moreouer ſhall be ſeene euery quarter with their places and ſtreets to iſſue forth, and with the place of the Generals lodging. And all theſe things ſhall be ſet downe in the moſt plaineſt and beſt order that we can.

Mountaine ſituations. Conſiderations. And when in like ſort it ſhall happen and occurre to encampe vpon any mountaine ſituation or hill: or may be variably ſet, as in a valley, neare broken rockes, riuers, woodes, or hollow wayes, and ſuch like, if the Camp-maiſter Generall be a skilfull man of warre (as he ought to be) and perfect in encamping an Army, he may aduantage himſelfe greatly therewith: and ſhall with litle arte, moſt ſtrongly fortifie his campe or allodgement. But aboue all he muſt be well aduiſed that hee encampe not in any place ſubiect vnto any hill or mount, or any alture that may ouerlooke the campe, and ſo from thence batter the Curtines of the rampiers; for being ſo occupied by the enemy, the Generall ſhould bee forced to diſlodge, and happely conſtrained to fight to his great diſaduantage: as it was like to fall out vnto *Frauncis* the French king, when hee was encamped at *Cambreſie*, vpon the borders of *Picardie*, for leauing a litle hill vnpoſſeſt, vpon the one ſide of his encampement, the which diſcouered ouer all his campe, and lay right ouer againſt the Curtines thereof: and the Emperour *Charles*, comming thither with his Armie, the ſayd place being eſpied and reknowledged by his Captaines, was by them encouraged, that, although the houre were late, and his people much wearied with long marching, yet were it not good to loſe, and let ſlippe the occaſion to gaine ſo aduantagious a feate: But this profitable & prudent aduiſe, was, by ſome others of great authoritie, contradicted, ſaying; that the morning enſuing, the ſame might bee better performed. The which fell not ſo out; for the king being aduiſed of this errour, ſent that night his *Italian* Infanterie to take and fortifie the ſame hill: which did fruſtrate the Emperours deſſeignes.

To beware to encampe in place ſubiect to any hill. Daungerous.

Example by Frãcis the French king at Cambreſie.

Charles the fift.

There are many and ſundry aduertiſements to be yet giuen, touching the marching, and encamping of an Armie, but, for not to be tedious, I paſſe them ouer; onely aduertiſing that the Cauallerie, in their quarters and allodgement, would be defended and ſhadowed by the Infanterie, as much as reaſonably might be; for that, vpon any ſudden alarme giuen, the horſe are farre more vnready then the foote, and do require a longer time in arming, and ordering; and of the footemen, the ſhot to be ſooner ready then the pikes, and therefore in the encamping, the due conſideration of each of theſe is to be had: as I haue in my plat of encamping, in fol. 157. ſet downe.

The Cauallerie in their allodgement to be defended by the Infanterie.

THE

THE FOVRTH DIALOGVE.

Wherein is set downe the forme, order, and Arithmeticall rules, for an encampement, both horse and foote, with the quantitie of ground for euery man and horse, his roome and station, and the plats to the same, &c.

Captaine.

NOw for the better declaration of these allodgements and encamping, we will giue an example with his figure. To encampe therefore an Armie in *Campania*, with his due measures, well proportioned, according vnto the seate and place, it is necessarie to know the *superficies* or face of the quarters of the Cauallerie and Infanterie, with their due places and streets, and other things necessary to the seruice of the campe.

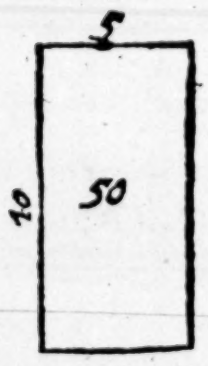
And for example; Let vs suppose to make an encampement of 36000 fighting men: that is to say; 1000 men at armes; 3000 Lanciers, and 2000 light horse and Hargulutiers: and of footemen 15000 shot, 12000 pikes, and 3000 short weapons. Vnto euery man at Armes, we will allow 8 lodgings, and vnto euery Lancier and Hargulutier we will allow 4 lodgings: and vnto euery roome or lodging, as well of Lanciers and light horse, as men at Armes, we will giue 50 superficiall foote of ground, which shalbe 5 foot in breadth, and 10 foote in length, as in this figure may appeare.

An encampement of 36000. fighting men.

8. allodgements to a man at armes.

4. allodgements to a Lancier.

Euery allodgement, 50 superficiall foote, is 10 in length, 5 breadth.



And vnto euery foote souldier, with his furniture, we will allow 64 superficiall foote of ground for his lodging: which shall be 8 foote in length, and 8 foote in breadth, as appeareth by this figure.

Euery foote mans allodgement 64 superficiall foote.



This being knowne, you shall then in the most commodious place about the

The Generalls standard.

middeſt of the ground where you meane to encampe, ſet vp the Generals ſtanderd, and about the ſame, ſtake out a ſquare plat of ground of fiftie or threeſcore paſes ſquare, for the Generals pauillion and place. Then ſhall be lined out two ſtraight ſtreetes, which ſhall come to cut or croſſe one another at right angles in the middeſt of the Generals place; the which are called the principall ſtreets, or Captaine wayes, extending Eaſt and Weſt, and North and South, or as the ſeate and region will permit. At the head of euerie one of the which, ſhall be a guard and watch toward the enemie, and an iſſuing out of the Campe. The which two long ſtreetes, croſſed at right angles, as is aforeſaid, commeth to quarter your encamping ground into foure equall parts, the center whereof ſhall be the Generals pauillion and place, and the other allodgements and quarters to be diſtinguiſhed as in the Plat following ſhall at large and particularly appeare.

The principall ſtreets.

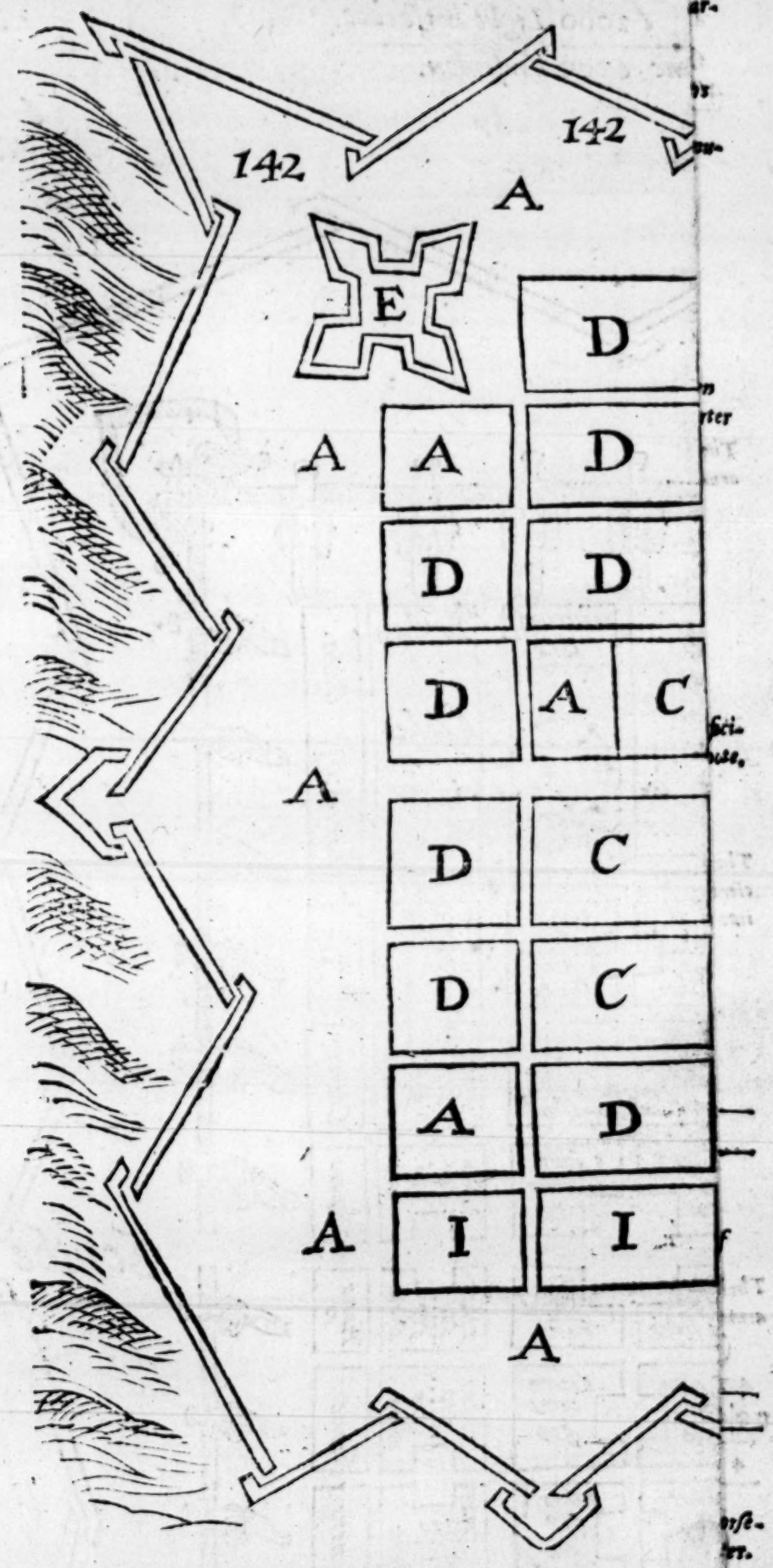
At euery ſtreetes end, a guard.

The Generals pauillion.

The

The se

This figure denoteth an incamping of the one of the sayd hils being neare vn cient distance off; not.



of th.

Noble

bins, deuided from the same by a street of 10 pales broade: vnto euery light horse I haue allowed 3 allodgements, and one allodgement for his place of armes, which doe make 4 allodgements for euery light horse. Now to multiply the

The first plat of encampment.

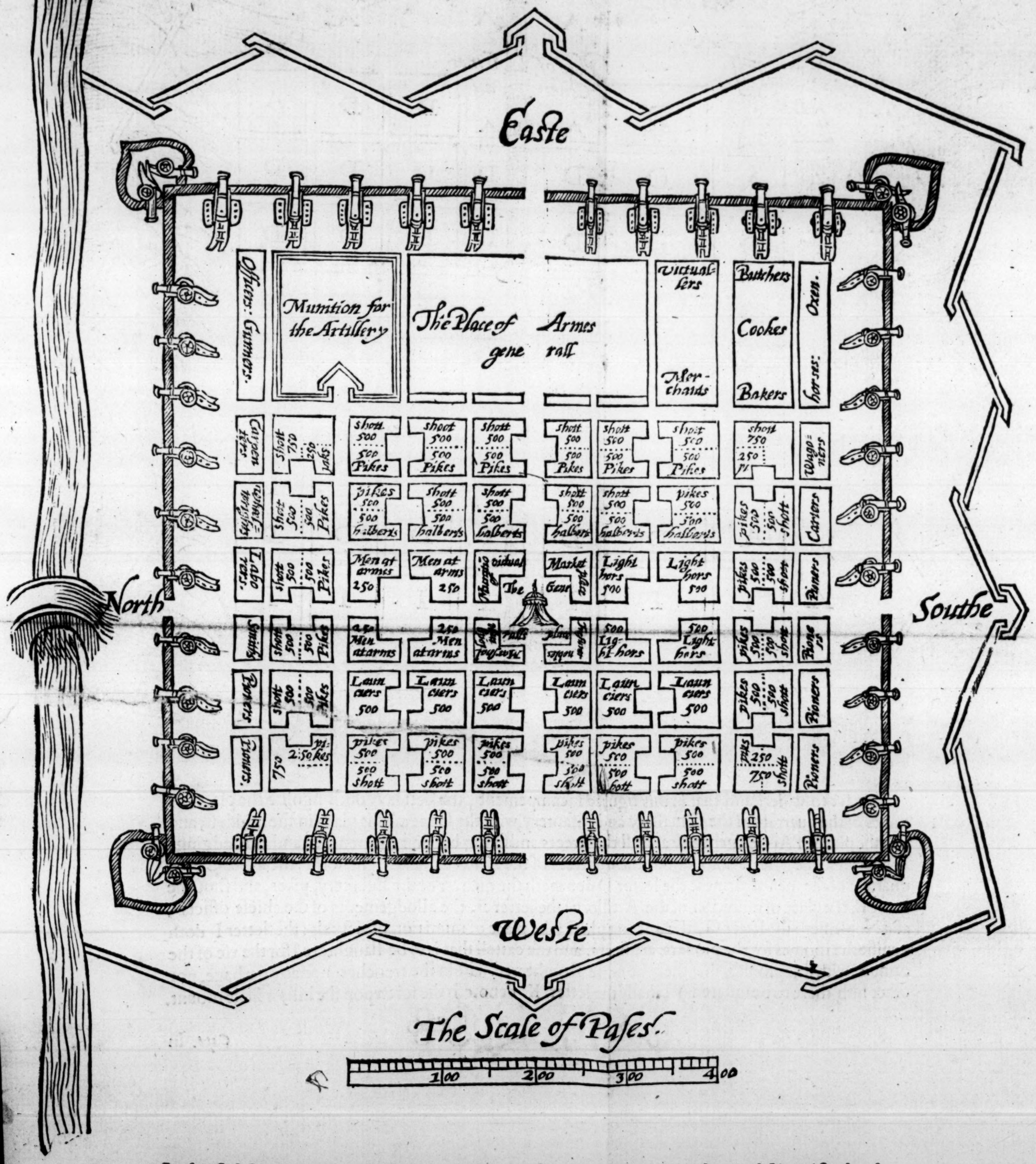
An encampment of 30000 *footemen, and* 6000 *horsemem, allodged and fortified in an open Campania: hauing a riuer running on the one side.*

Sorted { 15000 *shot.* / 12000 *pikes.* / 03000 *short weapons.*

summe 30000 *footemen.*

Sorted { 1000 *men at armes.* / 3000 *Launciers.* / 2000 *Light horse shot.*

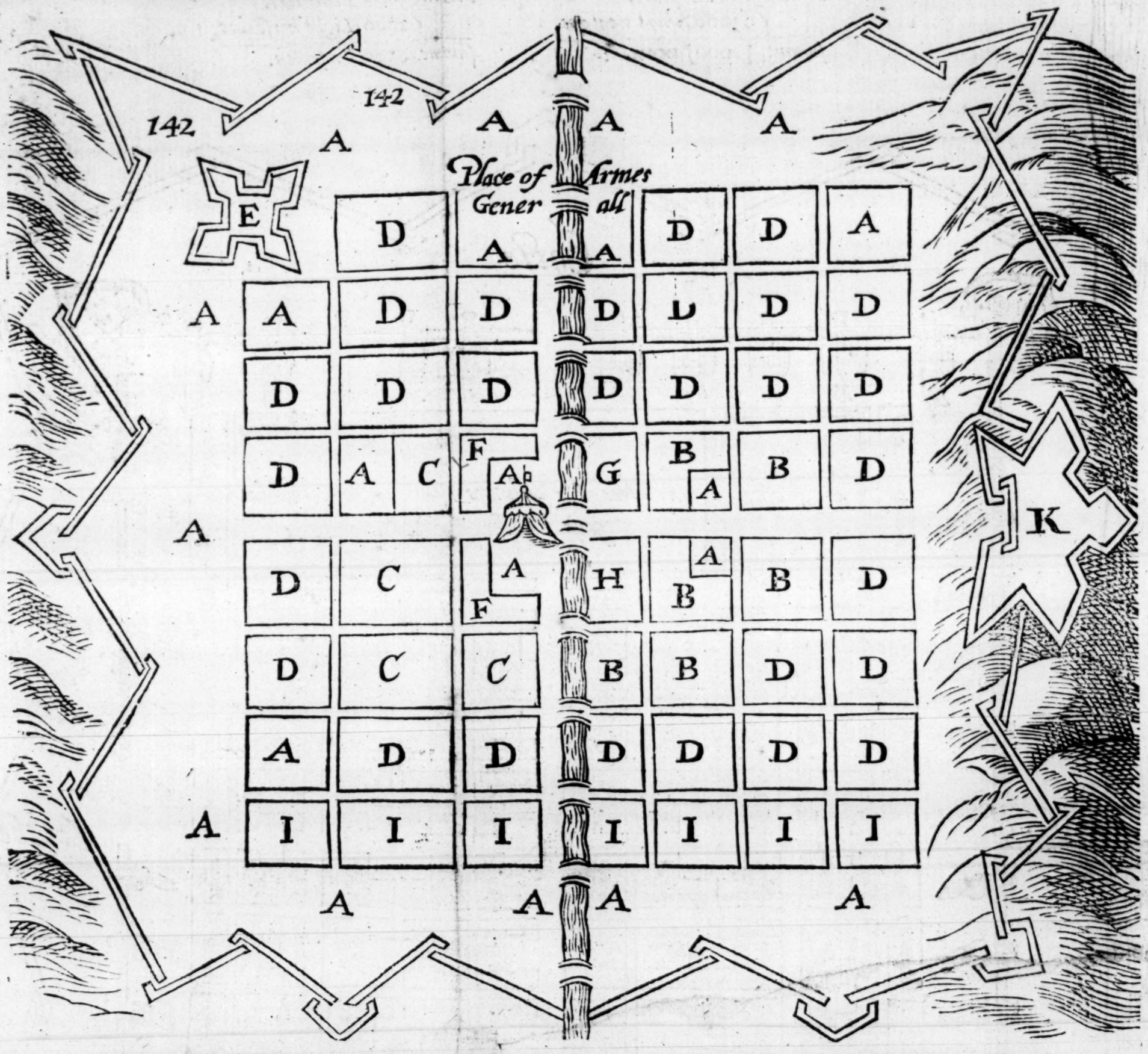
summe 6000 *horsemen.*



In this first figured plat of encampement of 30000 footmen and 6000 horsemen, distinguished and quartered as particularly aboue appeareth, I haue seated the Generall with some other chiefe Commanders, in the center of all the men of warre, as by their seuerall descriptions may be seene. I haue moreouer distinguished the said camp into the vsual names of Vauward, Battel, & Rereward, the pikes and shot, marked with the letter A, do belong to the Vauward, vnto whom do answere the Launciers, marked with the sayd letter A. And those marked with the letter B; do betoken the battell; vnto them do answer the men at armes, marked with B, also. And those marked with the letter C, are for the rereward, vnto whom do answer the light horse or Carbins, signed with the like letter C. The farther declaration, practike rule, and order of the said encampement, shall on the next side following be at large declared and shewne.

The ſecond figure of encampment.

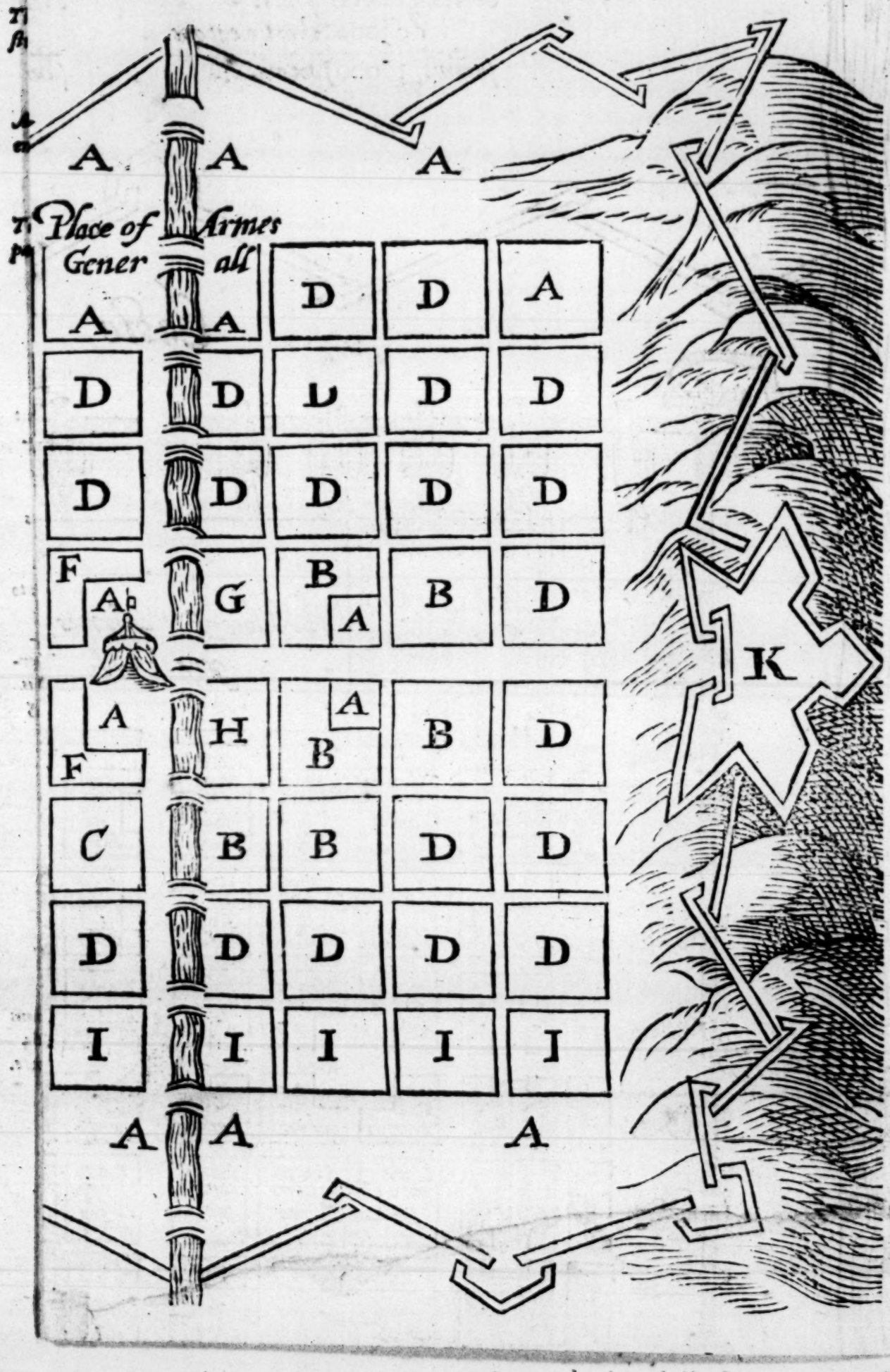
This figure denoteth an incamping in a valley betwixt 2 hils, with a ſmall riuer running in the midſt: the one of the ſayd hils being neare vnto the campe, is to be fortified as appeareth: and the other being a ſufficient diſtance off, not.



You are to vnderſtand that in this figured incampement, the letter A doth ſignifie the places of armes of the quarters of the Cauallery and Infantery, with the Generall his place in the middeſt; and alſo the place of Armes generall: and all the ſtreets and ſpaces betwixt the trenches and the lodgings or quarters. The letter B doth ſignifie the quarters of the Launciers, and light horſe: the letter C, the quarters of the men at Armes: the letter D denoteth the quarter of the Infantery, pikes, and ſhot: the letter E, the place of munition of the Artillery: the letter F, the allodgements of the chiefe officers, and Noblemen: the letter G, the market place; the place of muni tion of victuals: the letter I doth ſignifie the roomes for the pioners, artificers, and the cattell that is to be ſlaughtered for the vſe of the campe (with this prouiſo, that there be none ſlaughtered within the trenches, nor any garbage, nor other filth there to be ſuffered.) Finally the letter K denoteth the fort vpon the hill, or little mount.

cond figure of encampment.

in a valley betwixt 2 hils, with a ſmall riuer running in the midſt: nto the campe, is to be fortified as appeareth: and the other being a ſuffi-



Capt. In the first of these two figured plats of encampement of 30000 footemen, and 6000 horsemen, distinguished as there appeareth; I haue dissigned for the Generals pauillion and place, 80 pases square, comprehending therein the breadth of the two maine streets, of 20 pases each in breadth. Vpon one quarter of the Generals place, is lodged the Lord Marshall and his retinew; vpon another quarter is lodged the Treasurer, with extraordinary Gentlemen and Embassadors: vpon another quarter is the munition of victuals; and vpon the last quarter, is made the place of market: euery of these 4 quarters, and places containing their narrow front, butting vpon the maine street South & North, & East & West, 45 pases and in length 63 pases, fronting along the small crosse streets. Round about three of the said quarters, is drawne a smal streete, of 10 pases broade, and on the other part is a streete running, of 15 pases broade: without the which streets, vpon the one side of the Generals place, and the other two places of the Lord Marshall, and munition of victuals, I haue quartered the 1000 men at armes in 4 little quarterets containing in euery quarteret 250 men at armes: allowing for euery man at armes 6 allodgements, and 2 allodgements for his place of armes, which are 8 allodgements; containing euery allodgement 50 superficiall foote of ground, that is, 10 foote in length, and 5 for breadth. Now, the working thereof is thus: multiply the 1000 men at armes by 8 allodgements, it maketh 8000 allodgements, the which 8000 multiply againe by 50 foote superficiall, which is allowed for euery allodgement, and it maketh 400000 superficiall foote; the which 400000, deuide by 25, it commeth out to be 16000 pases superficiall, for 25 superficiall foote, do make a superficiall pase. So the 1000 men at armes doe require, 16000 pases superficiall for their quarters, and place of armes. Now to deuide these 1000 men at armes into 4 litle quarterets, each quarteret cõtaining 250 men at armes, deuide the 16000 pases superficiall by 4, and the product will be 4000 superficiall pases for euery quarteret, whose square roote is 63, for the square of each quarteret, being quartered one way, with the great maine streete of 20 pases broade, and the other way with a lesser streete of 10 pases broade. Now to know the square side of all these 4 quarterets, extract the quadrat root of the 16000 superficiall pases, being 126 pases, and that is the due square of euery side. Finally to know what square of ground, the place of armes for these thousand men at armes shall containe, multiply the 1000 men at armes by two allodgements of euery man, and it amounteth 2000 allodgements: then againe multiply these 2000 by 50 foote superficiall for each allodgement, and it maketh 100000 superficiall foote, this 100000 superficiall foote, deuide by 25, to bring them into superficiall pases, and it produceth 4000 pases superficiall; of this 4000 pases superficiall take the quadrat roote, which commeth out to be 63 pases square, little more.

A declaration of the former encampement. The Generals place.

The Lord Marshals allodgement.

The Treasurers allodgement.

The place of munition.

The place of market.

The 1000 men at armes quarter

The rule to worke it.

25 foote do make a superficiall pase of 5 foote.

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(1
4(2
266(4
1|60|00|
 1 2 6
2446
 23
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Their place of armes.

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1(3
44(1
40|00
 6 3
3629
 1
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Thus the place of armes of these 4 little quarterets, cõtaining in them all 1000 men at armes, doth containe 63 pases square, besides the breadth of the two streets, which crosse the quarters, not comprehended therein. Vpon the other side of the Generals place, and also without the two other places of market, and Noblemens lodgings, Southward, I haue dissigned the 2000 light horse, or Carbins, deuided from the same by a street of 10 pases broade: vnto euery light horse I haue allowed 3 allodgements, and one allodgement for his place of armes, which doe make 4 allodgements for euery light horse. Now to multiply the

The light horsemens quarter.

2000 light horſe by 4, and it produceth 8000 allodgements: then I multiply againe the 8000 by 50 foote, and it amounteth vnto 40000 foote ſuperficiall; then to bring thē into ſuperficiall paſes, I deuide the 4000000 foot by 25 (for 25 ſuperficiall foot, do make a ſuperficiall paſe) and the product will be 16000 ſuperficiall paſes, for their quarters and places of armes. Now, to repart theſe 2000 light-horſe into 4 litle quarterets, ech quarteret cōtaining 500 light-horſe, I deuide the 16000 paſes ſuperficiall by 4, and the product is 4000 ſuperficiall paſes, for euery quarteret, the ſquare roote whereof is 63, being quartered one way with the great maine ſtreete of 20 paſes broade, running North and South, and the other way with a leſſer ſtreete of 10 paſes broade, running East and Weſt. Now againe, to know the ſquare ſide of all theſe 4 quarterets; take the quadrat roote of the 16000 ſuperficiall paſes, which is 126 and little more, and that is the due ſquare of euery ſide of all the 4 quarterets, not comprehending the breadth of the 2 ſtreets which croſſe the ſame therin; and the ½ of 126, which is 63, is the iuſt ſquare ſide of euery one of the 4 little quarterets. And now laſtly to know what quantity of ground the place of armes for theſe 2000 light horſe will require, I multiply the 2000 light horſe by 1 allodgement, which is 50 ſuperficiall foote, and it maketh 100000 ſuperficiall foote, the which 100000 I deuide by 25, ſo it commeth out to be 4000 ſuperficiall paſes, the quadrat roote whereof is 63 and a litle more, and ſo much containeth their place of armes, beſides the breadth of the aforeſayd two croſſe ſtreets, the which do enlarge their place of armes by ſo much. Thus are the men at armes lodged vpon one ſide of the Generals place, and the light horſe vpon the other ſide, as in the plat plainely appeareth.

2(3
44(1
4000|00|
6 3
1 2.

Their place of armes.

Next, vpon the Weſt part of the Generals place, and without the two quarters or lodgings of the Marſhall and Treaſurer, with a ſtreete of 10 paſes broade betwixt, I haue lodged the 3000 launciers in 6 little quarterets, containing each 500 launciers; vnto euery launcier I haue giuen 3 allodgements of 50 ſuperficiall foote *per* allodgement, and 1 allodgement for his place of armes; the which are in all 4 allodgements to euery Lancier. Now, I multiply the 3000 launciers by 4 allodgements, & it amounteth 12000 allodgements, the which 12000 I multiply againe by 50 foote ſuperficiall, and it maketh 600000 ſuperficiall foote, the which 600000 ſuperficiall foote to bring them into paſes, I repart by 25, and it produceth 24000 ſuperficiall paſes. Now this 24000 ſuperficiall paſes, I deuide againe by 6 (for that I allodge the 3000 launciers in 6 quarterets) and the product will bee 4000 ſuperficiall paſes for euery quarteret, the quadrat roote whereof being 63 little more, is the due ſquare of paſes euery way, of euery one of theſe 6 quarterets: then againe I repart the 6000 launciers by 6, and there cōmeth forth 500 launciers to bee allodged in euery quarteret. Now to giue vnto theſe 3000 launciers their conuenient places of armes, I allow vnto euery 1000 launciers their place of armes cōtained betwixt two quarterets, allowing for the ſame vnto euery Launcier one allodgement of 50 ſuperficiall foote; to doe the which, I multiply the 1000 launciers (which are contained within each two quarterets) by 50 foote ſuperficiall, being the content of one allodgement, and it amounteth 50000 ſuperficiall foote, the which 50000 ſuperficiall foote, to bring them into paſes, I deuide by 25, and it produceth 2000 ſuperficiall paſes; the quadrat roote whereof being 45 paſes little leſſe, is the due ſquare of the place of armes allowed

The 3000 launciers quartered into 6 quarterts.

Their place of armes.

(7
40(4
20|00
4 4
8

for

for 1000 lanciers, allodged within two quarterets (as in the plat appeareth) beſides the breadth of the ſtreets which do deuide the ſame, by ſo much enlarging euery place of armes. Thus the 3000 launciers are deuided and allodged into 6 quarterets & vnto euery two quarterets is appointed their place of armes, as in the firſt plat of encampment may appeare.

Next vpon the out ſides of theſe 6 quarterets of launciers, and a bout the men at armes, and the place of victuals and market place, and laſtly about the Carbines or li ghthorſe, haue I drawne and ſtaked out a ſtreete of 15 paſes broade, to ſepe-rate the horſe companies from the foote, as by a red line there drawne will appeare. Then round about this ſaid ſtreete, haue I quartered & allodged the 30000 footemen into 30 quarterets, diſtinguiſhed by ſtreets of 10 paſes broade, containing in each 1000 footemen, and vnto euery two quarterets their place of armes. Now to do the which, I haue giuen vnto euery footman for his allodgement 64 ſuperficiall foote of ground, and vnto euery one 32 ſuperficiall foote of ground for his place of armes, both the which ſummes do make 96 ſuperficiall foote of ground for euery foote ſouldier with the place of armes. This being done, I multiply the 30000 footemen by 96 ſuperficiall foote, and it commeth vnto 2880000 ſuperficiall foote of ground for the quarters of theſe 30000 footemen, the which 2880000 ſuperficiall foote, I deuide by 25 to bring them into ſuperficiall paſes (for 25 ſuperficiall foote do make a ſuperficiall paſe) and it produceth 115200 ſuperficiall paſes. Now, for as much as I doe beſtow and place theſe 30000 footemen, round about the Generals Pauillion and place, and wthout the ring of the horſemens quarters (for the more ſurer guard of the Generall, and better defence of the horſemen, who are longer time in arming then are the footemen, if the enemy ſhould offer any ſuddaine attempt) and for that I thinke good to deuide them into 30 quarterets; I doe repart the ſayd 115200 ſuperficiall paſes by 30, and the product will be 3840 ſuperficiall paſes for euery quarteret; the ſquare roote whereof being 62 paſes (litle leſſe) is euery quarteret of 1000 footemen, ſquare by euery ſide.

A ſtreete of 15 paſes broade.

The 3000 footemens allodgement.

The rule.

Reparted into 30 quarterets.

Now to giue vnto euery two quarterets their place of armes, containing each quarteret 1000 footemen, is in both 2000 men, allowing to euery foote ſouldier 32 ſuperficiall foote for his place of armes, I doe multiply the 2000 men by 32, and it amounteth vnto 64000 ſuperficiall foote; then to bring them into paſes, I deuide the 64000 paſes by 25, and there commeth out 2560 ſuperficiall paſes, whoſe quadrat roote is 50 and little more, the which 50 paſes is the due ſquare of euery ſide of the place of armes belonging vnto 2 quarterets, beſides the breadth of the ſtreete which deuideth the ſayd two quarterets; for by ſo much the more is the place of armes enlarged. Thus are the 30000 footemen lodged, and deuided into 30 quarterets, containing each quarteret 1000 men; and euery ſquare ſide of the ſayd quarteret, doth containe 62 paſes; and vnto euery 2 quarterets, is giuen their place of armes, extending each way 50 paſes, beſides the breadth of the ſtreets that cutteth the ſame in the middeſt, whereby the places of armes be ſo much enlarged.

Their places of Armes.

And becauſe that the ſhot are more ready then the pikes, I haue placed almoſt all the ſhot in the ring of almoſt all the outmoſt quarterets, to bee ready to skirmiſh with the enemy (if he ſhould attempt any thing) whileſt the other

The placing of the ſhot.

foote and horſe do arme themſelues: the which ſhot (being in all 15000, I haue diſtributed thus. In the 4 quarterets which are vpon the 4 angles of the allodgements, I haue placed 750 ſhot, & into euery one of the other outermoſt quarters there is ſet 500 ſhot, being 20 outmoſt quarters, beſides the 4 angles; ſo there is beſtowed about the ring of the allodgements 10000 ſhot: more in the 4 corner quarterets 3000 ſhot; and the other 2000 ſhot are placed in the 4 other inmoſt quarterets, amongſt the halberds and ſhort weapons: finally, all the pikes are placed in the quarterets within the ſhot; as in the firſt plat of an encampement doth particularly appeare.

Munition of the Artillery.

Places for victualers.

Moreouer, vpon the North eaſt angle of the encampement, I haue deſſeigned the place of munition of the Artillery, of 160 paſes ſquare; and on the South eaſt corner of the encampement, is there left 2 other ſmaler places of 65 paſes broade, and 160 paſes long, ſeruing for victualers, butchers, cookes, bakers, and ſuch like: and without them againe, is there another long place for horſes, oxen, and cattell ſeruing the campe: and vpon the South ſide of the encampement are lodged, the wagoners, carters, laborers, & ſome pioners: & again vpō the North ſide of the encampement, and by the place of munition of the Artillery, is placed firſt, the gunners, and ſome officers of the Ordinance, and then the carpenters, wheel-wrights, ſmiths, labourers, and ſome pioners, as there ſeuerally appeareth. And betwixt the place of munition of the Ordinance, & the victualers place in the midle front of the encampement, due eaſt is placed the place of Armes general, containing in breadth 280 paſes, and 160 paſes in length, Eaſt and Weſt, and vpon the after front of this place of Armes generall is placed, armourers, cutlers, and ſuch like, and at the one front of the 2 places of the victualers, cookes, and bakers, are placed taylors, ſhomakers, and ſuch like. Moreouer the encampement is deuided Eaſt, and Weſt with 9 ſtreets, and it is deuided North and South, with 6 ſtreets, of which, the 2 maine ſtreets do containe in breadth 20 paſes, and the 4 others (lined with red, Eaſt, & Weſt, North, and South) 15 paſes broade a peece, and the reſt (being ſmall ſtreets) of 10 paſes broade euery one. Finally, the ordinance is placed, about 60 paſes diſtant from the ring of the encampement, with a good vaumure caſt vp before them; and the Artillery planted vpon the ſame. Laſt of all, is there a running trenche caſt round about the Campe, about 80, or 100 paſes diſtant without the vaumure of the Ordinance. All the which matters do particularly appeare in the aforeſayd plat of encampement: but if this Campe were to continue any long time vpon ſome ſeat or place, then muſt it be more ſtrōger fortified, with deeper ditches, ſtronger bulwarkes, and ſcances, thicker *terraplenes*, higher *caualleros* and mounts, to ſcoure with the Ordinance round about the Campe, or otherwiſe fortified in ſuch ſtrong ſort, as the prudent Camp-maiſter, with his skilfull enginers ſhall thinke good and deuiſe. The lodgings and tentes of the Chiefe Commanders both of horſe and foote, may be ſeated on the front of euery their places of armes. To conclude I giue aduertiſement of one thing worthy noting: that there bee no ſlaughter houſe kept within the Ring of the Campe, or any garbadge left; or any other thing of annoyance or ſtinke, and alſo that you encampe in no infectious place, leaſt the corrupted ayre do infect your people; as it did the French Kings campe before *Naples*.

Places of the wagoners.

Place for the gunners and artificers, and pioners

Place of armes generall.

Diuiſion of the encampement.

The artillery placed.

A running trench.

Lodging of the commanders.

No ſlaughter houſe kept within the ring of the campe.

Good conſiderations.

This

This aforesayd calculation, methode, and rule of encamping, will serue for example for another sort of encamping vpon any situation, of what number of men soeuer. But it must bee thoroughly conceiued, practised often, and the due measures well considered: and hauing all the aforesayd points perfectly in sence and memory, there may bee made any encamping verie readily; with the due proportion, and measures of the quarters, places, streets, and all other parts necessary to the same encampement, vpon what situation soeuer it be: as by the aforesayd writings, rules, methode, and desseignes, may bee vnderstood and learned,

By these rules wel conceiued, may any encampement be made, and assigned.

THE FIFT DIALOGVE.

Wherein is discoursed touching the remouing of a Campe, and of the care and diligence to be had therein.

Gentleman.

TRuly (Captaine) you haue made a long discourse of the encamping of an Army: and I neuer thought it had bin a matter of such skill and readinesse, whereby I perceiue, it is not the least point of your Martiall matters.

Capt. No truly, but rather one of the greatest, and a point of great consideration, care, and skill, and it importeth much for a Campe-maister Generall to be most expert therein: for by bad regard, and litle skill, the whole campe may come to be in hazard.

The encampment is a point of great consideration.

Gent. But I pray you what order is obserued in remouing of a campe, & withdrawing from the enemy?

The remouing of a campe.

Capt. The marching and the encamping of an army being a continuate thing, the dislodging or remouing of a Campe must needes be a consequence. Therefore I will with as much breuitie, as I may conueniently, declare vnto you what I conceiue thereof; and that which hath bin seene in our time touching the same. Presupposing therefore, that there be two enemy Armies, encamped within sight one of another, or at the least not farre distant a sunder, and because it is a most important matter, to know how many and sundry operations a braue man of warre or good chiefe may do, yet herein there is many considerations to be had. For although to retire by night, and to remoue away from the enemy, doth seeme to be the surest remedy that can be found, me thinkes, notwithstanding that the same is not sufficient inough to attaine an intention with securitie, if the said retirer be not befriended, either with the situation, or with some other parts and conditions of the countrey whether he meaneth to retire. And comming vnto the particulars, I say; that when a campe remoueth and dislodgeth by night, it is needfull to vse all possible silence and diligence, the which if it be not assisted with the seate, and qualities of the countrey, it is not yet inough; as hee which is to march thorough a plaine and champain countrey, & in open places, and not hauing (vpon any occasion offered by the enemy) some woods, valley, riuer, rocks, or such like, thorough the which mẽ may hardly passe; but being so (as I say) it may thẽ suffice

Remouing by night.

Silence and diligence.

to hold skirmiſh: for that the enemies horſe approching may be thereby hindred and kept backe; but otherwiſe one ſhold be conſtrained to fight againſt ones will, with great diſorder, eſpecially carrying along the Artillery and other impediments of the campe, the which with reaſon is not to bee left in pray to the enemy. And in like ſorte it is not conuenient to march the Army out of his ordinary pace, for if a man bee ouer ſollicitous and haſtie therein, it would eaſily conioyne an euill opinion vnto the ſouldiers former conceipt, growne by ſuch diſlodging and retiring: a matter truly of great daunger to cauſe an vnremediable diſorder to enſue, as many times it hath bin ſeene come to paſſe, whereas the army that purſueth the enemy, hath not thoſe impediments and difficulties: for they may leaue all impediments behind. And if the purſuer do march with ſpeede, it is done with more deſire and courage; the chieftaines vſing braue and honourable words, as in ſuch caſes be conuenient, and therefore (in mine opinion) the diſlodging by night is not very ſecure, vnleſſe it bee (as I ſayd) befriended and ayded with ſome ſeate of aduantage: as it chaunced vnto the aforeſayd *Francis* the French King, when at *Cambreſy*, he retired from the Emperour by night, that by the benefit of a great wood he might ſaue his Army: and hauing paſſed thorough the ſame, when the enemies horſe ouertooke him, where hee made a ſtand; and where as well by reaſon of the aduantage of that wood, as by the commoditie of the ſeate where he ſtood, he might well and boldly fight with the enemy, as by experience of them of the Emperours part was ſeene: who ouer greedily purſuing the enemy, iſſued out of the wood, euen vpon his troupes, where the moſt part of them were ſlaine, or taken priſoners.

To obſerue good array.

The purſuer.

Ayded by aduantage. Example.

Example.

The very ſame caſe happened alſo vnto the proteſtants Army in *Germany*, when they would remoue and withdraw themſelues from the Emperours campe, being both the Campes neare encamped together, that diſlodging by night, they had not farre to march, to enter into a very ſtrong valley, where they could not, but with the enemies great diſaduantage, bee charged and ſet vpon: and for that there was in the ſame valley a little hill, the ſame was preſently poſſeſt by the proteſtants, and planted with good ſtore of field ordinance, and with ſtrong troupes of foote and horſe, and in ſuch ſort occupied, that what with this preparation, and with that which they made in a neare adioyning wood, planting the ſame full of ſmall ſhot; the Emperours power could not purſue them, as they had pretended. For as ſoone as they were approched neare vnto them, they ſaw that they were retired vnto a place both by art and nature moſt ſtrong: and therefore were let paſſe without any more annoyance. Wherefore I ſay, that with the fauour of the ſeate, and quality of the countrey, the diſlodgement may be thus aſſured; as by the aboue recited examples may appeare. And alwayes it is farre better to diſlodge by night then by day, for to gaine at the leaſt, the diſtance of ground, to conduct the Campe to place of ſecurity and ſtrength: for the remouing by day, without the great helpe and ſecuritie of the ſeate, moſt commonly is very daungerous; except the Remouer ſhould farre abound in Cauallery; and therefore the Campe, which is inferiour in horſe, ought to diſtant himſelfe, as farre as he can, from the enemy; for not, by ſuch accidents, to be conſtrained either to fight vpon diſaduantage, or commit ſome other foule diſorder.

Better to diſlodge by night then by day.

Conſiderations.

Concluſion.

Thus haue I at large (and more large then I meant) declared vnto you, the office

fice and parts of a Campe-maiſter Generall, with the orders to be obſerued in marching, in encamping, and in remouing of a Campe, with rules and inſtructions to effect the ſame: the which being well conceiued, conſidered, and regarded, may ſerue in time of ſeruice, to great good and importance.

Gent. Truly (Captaine) you haue taken paines herein, and haue touched many good points worthy noting; eſpecially ſhould warres fall vpon vs: from the which God defend vs. But haue you yet any other officer to treat of, vntill you come to the Lord high Generall?

The Election, office, charge and dutie of the High treaſurer of an Armie.

Captaine.

THe High Treaſurer of the Armie, is commonly choſen and appointed by the Prince; and is in the number of the principall officers that are in the campe, and alwayes one of the Councell of warre, by reaſon of the great affaires committed to his charge & handling, which is, the kings monyes and Treaſure, being the ſinewes of the warre: and without the ſame it were impoſſible for an Army long to hold and continue, hauing to deale with a ſtrong and obſtinate enemy. This high Treaſurer hath the beſtowing of the kings money, in diuerſe and ſundry vſes; and all to conduct the warre to a good end. Moreouer, he is to receiue the tributes, taxes, and tailliages of the Cities, Townes, or Countries, where the conqueſt is made (if there be any ſuch) and alſo doth receiue the money which the Collegates do contribute, being any ſuch ligue, and if they contribute money, and not people of warre.

Treaſurer of the Armie.

Money, the ſinewes of warre.

The parts of his office.

He hath in like ſort the ſuperintendencie of the victualling of the campe: and is to haue a great care to giue content (to the vttermoſt of his power) as well to the ſmall, as to the great, & to ſee that as well the poore Pioner, as the commaunding Colonell be ſatisfied and payed their payes & duties, at due & conuenient termes, if he will that his Prince bee well ſerued, and the ſouldiers to obey their Commanders and Captaines: and to liue in honeſt and commendable ſort, as diſciplined people of warre ought to doe: otherwiſe, if the pay be wanting and not performed, I cannot ſee how a campe can long ſtand on firme foote; or the ſouldier paſſe and liue without robbing, rifling, and ſpoyling, and to commit a thouſand exceſſes: neither can I perceiue how any good order may be obſerued, if neceſſitie conſtraine men to commit theſe faultes. Yet I will not hereby inferre, but that in times of theſe wantes and neceſſities, men ought, with all poſſibilitie, to haue patience, for it is a wonderfull vertue in a ſouldier, at ſuch an inſtant pinch: and to abſteine from committing theſe exceſſes, although their pay be long on comming. For I know very well, that monyes cannot alwayes be prouided, and come at the due time appointed, by reaſon of ſundry impediments that may hinder the ſame: & then ought the honeſt ſouldier to haue patiẽce. But if the pay ſtay ouer long, there is nothing more vniuſt then to make mẽ to liue by windy words & ayre: therfore in ſuch meane while they ought, either to diſtribute lẽdings or a certaine quantitie of victuals dayly, & alſo ſomething to cloath men, & other ne-

An Armie without pay cannot long ſubſiſt.

Patience a rare vertue.

Nothing more vniuſt then to make men liue by windie words and ayre.

ceſſaries, expecting vntill the pay do come: or elſe they muſt be ſuffered to liue at their owne diſcretion; that is, to take where and what they may finde: which is a thing not to be permitted, but in caſes of great extremitie, and in caſes, where all other *remedies* be paſt: for this dangerous libertie is occaſion that ſouldiers will fall into ſuch an inſolencie, that it would be almoſt impoſſible to reduce them againe into their firſt *eſſe*, or being, the which is of leſſer loſſe and daunger then to ſuffer them to dye with famine, or to ſee the campe diſſolued: one of the which would of neceſſitie enſue, were there not preſent remedie imployed: and then the fault is not to bee imputed to the Commaunders and Captaines. Some man happely will ſay that the Chieftaines may with ſweet wordes and perſwaſions entertaine, and qualifie the ſouldiers. I confeſſe the ſame: but that is but for a ſmall time: and that too, no longer then that the ſouldiers do giue credit vnto their perſwaſions: But when that they ſhall once perceiue that they are led forth with wordes, and fed with wind from day to day, then is there no remedie to deteine them long, but that they will murmur and grudge in diuerſe and ſundry ſortes; and happely runne into riot, ſeeing themſelues deceiued by their Commanders, vnto whom, from thence euer after they will giue but ſlender credite and beliefe: and may happely be an occaſion, that they will another time diſtruſt them, yea, although that they tell them the truth; or at ſuch time of importance as ſhould be greatly needfull to performe any honorable action: therefore, one of the principalleſt things that a Commaunder ought to haue in recommendation, is not to vſe falſe ſpeeches to his ſouldiers, if the falſitie may afterwardes be diſcouered. And although that herein there ought to be had great conſideration and regard, yet now a dayes, ſome will (forſooth) that fables do paſſe for currant payes; and Captaines wordes, to ſerue ſouldiers foode; whereby the credite of Commaunders is greatly diminiſhed amongſt men of warre: and in concluſion, this is a willing to couer officers faultes, who happely haue ſpent and employed the money in ſome their other priuate commoditie.

Dangerous liberty breedeth inſolencie, a vice not eaſily remoued.

An obiection.

The anſwer.

A great Commaunder not to vſe many falſe ſpeeches vnto his ſouldiers.

A bad opinion.

Gent. Doubtleſſe there be many amiſſes that do paſſe in the world: for we haue of late ſent ſoldiers ouer into Ireland at ſundry times, and as often as we ſend, we finde others to returne againe from thence as faſt, being able, ſound and ſufficient men, yea more likely men then thoſe that we ſent thither: and in conference with them, we heare but hard ſpeeches, and truly were they true, a thing to be pittied, and to be more narrowly looked vnto, by ſuch as haue authoritie for the ſame: we are dayly at charge, and often ſending forth aydes, the which doubtleſſe, I thinke to be moſt neceſſarie, yea were it much more, then it is, conſidering the great occaſions and dayly occurrants: but yet me thinkes it very ſtrange, that ſtrong and ſufficient men ſhold ſo flocke from thence, ere the action were performed, and new *Biſognios* ſent in their roomes; which ſeemeth that there is ſome miſterie therein.

Souldiers ſent into Ireland.
Soldiers returning out of Ireland.

A matter to be looked vnto, and to be redreſſed.

Capt. No doubt, but there be ſome faults in all parts of the world, and happely among officers, who, although they ſee, yet will they winke, and beare one with another: but greatly to be wiſhed, where amiſſes be, reformation to be had.

Gent. Truely I haue heard ſome learned men, and good Lawyers ſay: that the moſt of you Captaines are but hungry fellowes, which breedeth many inconueniences: and therefore (ſay they) it were farre more neceſſary that the Gentlemen of

Some Lawyers opinion touching Captaines and ſouldiers.

of euery countrey or ſhire ſhould haue the conduction and leading of their owne countreymen and neighbours, where by great amitie and good orders would grow, and more willingly fighting vnder their ſuch countrey Captaines, then vnder a ſtraunger whom they know not.

Capt. Thoſe ſpeeches and wiſhed order in ſome reſpectes were very good: but where haue we in euery ſhire ſuch Gētlemen of experience & skill, fit to cōduct & lead men, eſpecially againſt a braue & politicke enemy: for few we haue that haue ſeene ſeruice, eſpecially Countrey gentlemen which neuer went frō home: & how dangerous it is for an ignorant man to performe the parts of a perfect Captaine, I haue at large in our firſt booke diſcourſed. Indeed were it in a royall campe, well furniſhed with a number of good and braue Commanders, and skilfull officers, ſuch countrey Captaines were more tollerable: but in other peeces of ſeruice, where many times, a priuate Captaine with a band or two of men, muſt performe the good parts of a Colonell, or other great Commander, then I ſay, ſuch your named Captaines were daungerous. Reaſons I might ſhew ſufficient, but we ſhould then prolong time ouer much. *An anſwer.*

Gent. But they ſay, that many of your Captaines, are as skilleſſe as a raw countrey Gentleman: and therefore of the two euills it were better to chuſe the leaſt. *An obiection.*

Capt. This point hath already bin diſcourſed vpō in our firſt booke, & in mine opinion, the cauſes thereof ſhewen: But let me tell your greedy maiſter Lawyers one thing, in fauour of poore ſouldiers: that it is not ſo light a matter to skirmiſh among the muſket bullet, as it is to brawle at Weſtminſter barre: nor ſo eaſie to come to the puſh of the pike, as to pen out a Lawing plea: nor ſo pleaſant to paſſe amid the hizzing bullets as to walke in Weſtminſter Hall with hands full of gold: nor ſo iocande to heare the bouncing of the Cannon; as to hearken to the cry of the crowching Clyents: nor ſo delicate to lye in open *Campania*; as to wallow at home in a bed of downe: neither yet were the glittering of armour ſo gladſome an obiect to their eyes, as the gobbes of gold by heapes in their ſtudies; with many other points of warre not ſo toothſome as they ſuppoſe: I doe not hereby inferre againſt Law, nor Lawyers, for I wot well, a common wealth cannot ſtand without order and iuſtice: but giuing ſuch to vnderſtand, as hold to hard a conceit of ſouldiers, that the conductiō of warre is not of ſo ſmall waight, as they ſuppoſe: and happely ſhould they euer come into any hot peece of ſeruice, at their returne home they would ſing another ſong. *The anſwer.*

But let vs returne to the particular parts of our Treaſurer of warre. I ſay, that this officer is of great reputation; and the payment of Colonels, Captaines, and other officers of warre, are committed to his charge. Firſt he ought at the beginning of the actions to receiue from the Lord Generall the true number both of horſemen and footemen conteined within the Armie: and to haue a booke made by perfect computation, how much is due euery month to euery Colonell, Captaine and all other officers, as well for them, as for their Companies. *Particular parts of a Treaſurer of warre.*

His proportion of pay he ought to make it well knowen to the Generall: whereby the Generall might, in due time, procure prouiſion of money frō the Prince, both for the ſouldiers payes, and other neceſſaries.

He muſt conferre alſo with the Maiſter of the victuals to know how the ſtore is furniſhed, that conuenient prouiſion may be made in time. The like care muſt

he haue with the Maiſter of the Ordinance for the ſupplying his ſtore of munition, as occaſions and ſeruices of importance ſhall require.

He muſt know alſo of the Muſter-maiſter, how the bands be furniſhed; what ſouldiers be dead or ſlaine; when, and how many; and how, and when ſupplied: deliuering pay to euery Colonell and Captaine accordingly, keeping the warrants or notes of their hands for his diſcharge, and to aduiſe well the Muſter-maiſter to haue a good regard to the falſe Muſters that many times be made, to the hinderance of the action, and abuſing of the Prince: a fault ouer much vſed, and litle regarded.

He is moreouer to conferre with the Captaine Generall of the Artillerie, which is our Maiſter of the Ordinance, to know whether hee hath any billes from the Colonels and Captaines for powder and other munition receiued; that the ſame may be deducted at the day of pay.

Gent. What officers do aſſiſt or belong vnto him?

Capt. There be ſundry other officers, which are as it were appendent vnto him; as the Purueyor Generall, the Maiſter of the victuall, and the Pay-maiſter, with their Clarkes and Officers; of whom I leaue to diſcourſe, for that their offices are well knowen and more deſired: for that in our dayes they are very bad cookes that know not how to lick their owne fingers, and once an officer, and by conſequence, a rich man. To conclude, not onely vnto this officer, but vnto all others almoſt, is Arithmetike a great eaſe and helpe, not onely to digeſt their accounts in good order, but alſo a ready performance of the ſame.

Officers commonly grow rich.

The Office and parts of the Lord High Generall of the Armie.

THE FIRST DIALOGVE.

VVherein is ſet foorth the partes to be expected in ſo high a Commander: the foure principall qualities which the Romanes conſidered in the Commanders of their armies; how needefull it is to haue graue and experimented officers in the Campe.

Captaine.

The Lord high Generall.

THe Generall, the Prince with the aduiſe of his prudent Councell, doth elect, chuſe, and appoint: and being an office of higheſt degree and greateſt charge in the field, it ought to be encommended vnto a perſonage indued with partes befitting the function. Therefore, as he is the Officer higheſt in degree, ſo ought he, not only to know perfectly the partes of euery other officer, but alſo to excell them all, in religion, wiſedome, experience, policie, grauitie, ſecrecie, counſell, modeſtie, temperance, valour, magnanimitie, vigilancie, care, conſtancie, liberalitie, and reſolution; with all other good partes incident to a perfect man of warre: and how much all theſe good partes (and many more) ought to be in the perſonage elected to this high and carefull dignitie, by our former diſcourſes you may eaſily conceiue and gather; to the ende that he, being their Chieftaine and head, may not onely

Generall partes.

onely know how to gouerne them both in generall and in particular, in all Martiall actions: but alſo in his vertuous life and cariage, be a patterne, light, & lanterne vnto the whole Armie, to imitate: for in our old prouerbe we ſay: ſuch hunt, ſuch hound, ſuch maiſter, ſuch man: and ſo by conſequence, ſuch Chiefe, ſuch followers. For moſt commonly a wiſe, valiant and vertuous Generall, will chuſe wiſe, valiant, & vertuous Captaines, and officers: good & vertuous Captaines, will, as neare as they can, chuſe honeſt, ſober, and vertuous ſouldiers, or at the leaſt, reforme their faults, and do their beſt to bring them to the due forme of Militarie diſcipline. And as it is very hard for euery Commaunder to haue all the good partes incident to his function, yet ſuch as are indued with many, or the moſt of theſe partes, are beſt to be eſteemed; and ſo conſequently the reſt. For the accidents of warre are ſo diuerſe and manifold, that it altereth many times the humours of men: except being endued with conſtancie and magnanimitie; which ſingular vertues few men poſſeſſe: but greatly to bee wiſhed in all high Commaunders.

A lanterne of vertue, for the Armie to imitate.

A good chief will chuſe good Captaines and officers: good Captaines will breede good ſouldiers.

It is hard for one man to haue all good partes.

The accidents of warre are diuerſe; ſometimes altering mens humours.

Now to diſcourſe and reaſon in particular vpon the partes due to a Generall, our diſcourſes would bee ouer long; wherefore I will name the foure principall, which the ancient *Greekes* and *Romanes* did conſider in ſuch perſonages as they elected to bee conductors of their Armies: which were, 1 to be very expert and skilfull in the Art of warre, 2 to be valiant and magnanimous, 3 to bee of great grauitie and authoritie; and 4 to be fortunate in their ſucceſſes: the which parts me thinkes, a Prince ought to regard & conſider, in the election of his Generall.

The foure principall vertues conſidered by the Romanes.

1 2 3 4

Gent. Theſe partes and qualities do ſeeme to be very good indeede; but yet, I pray, declare more particularly thereof, that we may the better vnderſtand the ſame.

Capt. I ſay (Gentlemen) that thoſe Republikes would haue their Captaines Generall to haue great experience in Martiall actions, whereby they might prudently commaund and gouerne therein; and therefore did they alwayes elect and chuſe perſonages of great experience and practiſe, and of ripe yeares and iudgement vnto this office: yea with ſuch conſideration & care, that of the *Romanes*, after that the two *Scipios* were ſlaine, and their Armies ouerthrowen, by *Asdruball* the *Carthagenian* in *Spayne*; none of their beſt experimented durſt take vpon him the former charge, but onely young *Scipio*, called afterward *Africanus*, being ſonne to one of the ſlaine Conſuls, although contradicted by ſundry Senators, and chiefly by *Quintus Fabius Maximus*, alledging his young yeares, who onely offered himſelfe, and reſolutely tooke vpon him the determination to go to that Prouince, and accepted the defence of the ſame: ſhewing himſelfe therein the moſt valiant and nobleſt Gentleman then left in the *Romaine* Republike, and one that had bene nuzled vp in warre euen from a child; but not aboue 28. yeares of age; which cauſed the Senators (as I ſayd) to miſdoubt, that by reaſon of his young yeares, he ſhould want the due skill, experience, and prudence, conuenient for the gouernement of the *Romaine* Armie.

1. Experience ought to be in Martiall men.

The 2. Scipios. Asdruball.

Scipio Africanus.

Quintus Fabius Maximus.

Gent. But yet there haue bene many Princes in the world, who being of young age began to gouerne, and conduct their Armies: as *Alexander* being but a very youth, conquered all *Aſia*, and put all the whole world in a maze.

Alexander Magnus commaunded being young.

Capt. It is true, that many times for preciſe and forcible cauſes, it is neceſſary

Young Princes in warres ought to haue graue & experimented Captaines. Examples.

that Kings and Princes ſhould bee preſent with their owne Armies in perſon, although their age & experience be not great. But when this commeth to paſſe, they commonly carrie with them, moſt ancient, graue and experimented Captaines: as did *Alexander*, of the beſt and of moſt authoritie, which *Philip*, his father had for his Conductours and Counſellours of warre: and many other of all nations haue done the like, as in our time did king *Philip* of *Spayne*, whē he made *Don Iohn de Auſtria* his Captaine Generall, hee choſe and appointed for his aſſiſter, Counſellour, and Lieutenant, *Don Luis de Zuniga* the grand *Commendador* of *Caſtille*: and many of our Engliſh kings haue done the like; as did the famous conquerour *Edward* the third, who ſent with his eldeſt ſonne the braue Prince of Wales, for Coadiutors, Counſellours, and Captaines, the valiant Earles of Warwick, Suffolk, Salisbury and Oxenford; at their honorable iourney into *France*; where at the battell of *Poytiers* they ouerthrew the whole power of *France*, and tooke their king *Iohn* with his ſonne *Philip*, and a great number of the French nobilitie priſoners.

Don Iohn de Auſtria.

Edward the 3. the Prince of Wales. The battell of Poytiers. Iohn king of France and Philip his ſonne.

Don Sebaſtian king of Portugall.

Gent. Then how fortuned it that *Don Sebaſtian* king of *Portugall*, carried not ſuch experienced perſonages about him, at his diſaſtred iourney made into *Barbary*, being himſelfe ſo young, and without experience of warre?

Capt. You muſt note therein the proud and inſufferable nature of mans mind; eſpecially of them two Prouinces, *Spayne* and *Portugall*, which will not willingly endure any ſtranger to carrie any office and dignitie amongſt them: and men of experience and conduction hee had none in his owne Realme, by reaſon of his long continued peace.

Inſufferable nature of man.

The Spanyardes will not endure any ſtranger to be a Commander among them.

Gent. Yet me thinkes, that his determination was great and honorable.

Capt. It was ſo great, as was well ſeene by the ſucceſſe he had: and truly none can denie but that he carried a braue minde, and an high conceit: but yet by reaſon of his young age, and leſſe skill, he wanted conuenient prudence to the conduction of ſo honorable an action: for his preſumption and boldneſſe abounded, to his owne, and his peoples ouerthrow, which hath growen to a by word among the *Spaniards*, to the *Portugals* reproch; ſaying; *Pocos, y locos, y mal auenturados*. But I truſt in God, that if it pleaſe him to bleſſe vs no worſe then hitherunto he hath done, and to giue vs mindes and prudence to preuent their miſchiefes in time, we ſhall one day yet ſay by them, *Muchos, preſuntuoſos, y mal diſgraciados*: for ſurely their pretences and deſſeignes are moſt ambitious and cruell againſt all Chriſtian Princes and Countries, eſpecially againſt vs, vpon whom they watch but time and oportunitie to poure out their whole pots of poyſon: wherefore it ſtandeth vs vpon, all true and valiant Engliſh harts, to arme our ſelues firſt with the feare, and honour of God; then with prudence, magnanimitie, courage & valorous reſolution againſt this proud nation, the Popes mynions; *Spaniardes* I meane. But indeede, had *Don Sebaſtian* bene of ſuch Martiall prudence, and valour in the ſame, as was his grand father *Charles* the fift: or was *Henrie* the fift, *Edward* the third: and other noble kings of England and France, or as *Henrie* the third now king of *France* and *Nauarre*, and as was *George Scanderbeg*, and the laſt Prince of *Orange*, with ſundry ſuch others, hee would haue imitated them: who, in all their actions did annexe and couple vnto them, ancient and experimented Captaines, although they were moſt braue men themſelues:

The raſhneſſe of youth and want of skill.

The Spaniardes ambition.

It ſtandeth vs vpon to haue an eye thereunto.

Charles the fift. Henry the fift. Edward the 3. Henrie the 3 king of Fraunce. Prince of Orāge.

as did *Charles* the fift chuſe for his Generall at his enterpriſe vpon *Tunez*, *Alonzo de Aualos*, *Marquis de Guaſto*; and in *Germany* he choſe *Ferdinando de Toledo*, Duke of *Alua*: and ſo did ſundry of the other aboue named Princes, the like. *Alonſo de Aualos. Ferdinando de Toledo.*

THE SECOND DIALOGVE.

VVherein is diſcourſed of militarie valour: and the ſundry parts therof: as military prudence, with ſundry ſtratagems of warre: with many other martiall points.

Gentleman.

WEll now, ſith you haue declared vnto vs the firſt point, and quality of a Generall (which is experience) I pray proceede to the reſt.

Capt. The ſecond I ſpake of, was to haue militarie valour and prudence.

Gent. How is this military valour to be vnderſtood?

Capt. Military valour, is to be vnderſtood with vs, as true Magnanimitie with the Latiniſts: which is, beſides his care in the actions of warre; he is to haue induſtrie to practiſe them, and readineſſe to effect them, and conſtancy and true fortitude of mind in all perillous and daungerous ſucceſſes, as had *Edward* the third at the battel of *Creſſy*, and his ſon, the braue Prince of Wales, at the battel of Poitiers; and as had our noble *Henry* the fift at *Agincourt* field: and as had of late, this preſent king of *Fraunce* and *Nauarre*, in his honourable battell, againſt his rebell, the Duke *de Mayne*, with all his braue aſſiſtants, vpon an Aſhwedneſday, being the fourth of March in *Anno.* 1590. By whoſe magnanimity and martiall valour (next vnder God) was the victory moſt honourably atchieued, euen at ſuch time of extremity, as his troupes were diſarayed and ready to flie; who moſt magnanimouſly, in the very pinch and point of that diſaray, ruſhed boldly amongſt them, ſaying; *C'eſt moy, mes enfants, Voyez, icy voſtre Roy.* It is I my childrē, loe here your King: whereby they were ſo comforted, and encouraged, that they regathered themſelues, made a freſh head, and conquered in fine their conquering enemies.

Military valour, what it is.

Parts of magnanimity. Battell of Creſſie. Agincourt field. Henry king of Fraunce and Nauarre againſt the Duke de Mayne.

This fortitude, moreouer doth wonderfully ayde and helpe to the ouerthrowing and quenching of all diſordinate appetites: and to the end you may the better vnderſtand me, I will declare the parts more particularly. To little purpoſe were it for a Captaine Generall to be experienced, as before I haue ſayd, if his experience and skill did not manifeſt the ſame with his valiant actions: and to put the ſame in execution, it is neceſſary that he be carefull, vigilant, and diligent in all the matters which hee is to attempt, and put in practiſe, and moreouer to haue a naturall inſtinct and humour befitting the ſame: as particularly to know the qualities of the enemies Commander; whether he be ouer bold, raſh, and ineonſiderate, or timerous, ſober, and repoſed in his actions: and whether he bee

Fortitude of mind.

Experience manifeſted by valiant actions.

A naturall inſtinct to know the qualities of the enemy.

Great points to be considered.

ſubtill, politike, and diligent, or blunt, baſe minded, and ſluggiſh: whether he be a man deſirous to come to fact of armes, or a man of delay, auoyding the ſame: alſo to know what counſellours, conductors, and officers he hath, and in fine of what determinations: whether his enemies Army bee of new reared people and *Biſognios*, or of practiſed, skilfull, and auncient bandes, and of what nation they be: what deſſeignes and intents they hold, and vnto what end they aſpire: and alſo to conſider and paralleill his owne forces with the ſtrength and powers of the aduerſary: helping himſelfe in moſt of theſe matters, with good and truſtie eſpi-

Good and truſtie eſpials.

als, and thoſe to be well rewarded and payed, the which many times are as ſouer-aigne *Antidotes* againſt the poyſonous practiſes of the enemy: as the moſt braueſt and skilfulleſt Commanders of the world haue vſed: as did *Lewes* the eleuenth,

Lewes the 11 king of Fraunce Phillip Duke of Burgundy. Philip king of Spaine.

king of *Fraunce*, againſt *Phillip*, Duke of *Burgundy*, and as did *Charles* the fift, againſt the Proteſtants in *Germany*: and as now doth king *Phillip* of *Spaine*, too too much in all nations; and (no doubt) other Princes do practiſe the ſame: whereby many deſſeignes bee often diſcouered, and thereby preuented without fact of armes, onely with military prudence: the which may be effected and done

Military prudence.

with continuall diligence, and ceaſeleſſe care. For a braue mind and of high conceit, ought neuer to bee tired in toyling after vertue, and to attaine with coſt of trauell the glorious iſſues of his deepe deſſeignes: as did our famous King, *Henry* the eight, and others his predeceſſors, in their honourable attempts and atchiuements in *Fraunce*: and as did *Charles* the fift in his actions in *Germany* and *Italy*: & as did *Alexander*, *Iulius Caſar*, *Hanniball*, and *Scipio*, with many others more in their honourable enterpriſes and conqueſts.

And for aſmuch, as from ſuch military care and diligence, there is to be expec-

From military care and diligence do ſpring good ſucceſſes. Examples.

ted good ſucceſſe, it is conuenient that the Captaine Generall bee very induſtrious, to know howe to inuente newe occaſions of warre, to entertaine the enemy with long delay, if the caſe ſo require it; imitating *Quintus Fabius Maximus*, when he warred againſt *Hanniball*. And many times to corrupt with money; as did *Lewes* the ſecond king of *Fraunce* often practiſe; and as did *Monſier dela Treſmoille*, *Monſieur de Leuy* and *Triuultio*, Generals to *Lewes* the twelth King of *Fraunce*, when hee corrupted with money the *Switzers* which ſerued vnder the pay of *Lodowik Sforza*, Duke of *Millan*, vpon whom they layed hands, and vilely deliuered him to his enemies, the French: and as did the Prince of *Parma*, with the traytors, *Yorke*, and *Stanley*, and the betraying and deliuery of *Sutphen* vnto the Spaniards. And as principally doth King *Phillip* of *Spain* corrupt with his gol-

Phillips golden piſtolets corrupt moſt parts of Chriſtendome. Gonzalo Fernades.

denPiſtolets the moſt parts of Europe; according to their grand Captaine, *Gonſalo Fernandes*, ſaying: that Princes, Generals, and great Commanders, ought by one meanes, or other ſeeke to ouercome, and gaine their purpoſes: bee it by right or by wrong, a Spaniſh principle.

Moreouer he may by cunning meanes, and fained letters, cauſe the enemies

Swatagems by fained letters. Burbon Triuultio.

Captaines to be ſuſpected, and blemiſhed; as did *Burbon* and *Tryuultio*, the King of Fraunce his Generals, being beſieged, and very hardly diſtreſſed within *Myllan*, by the Emperour *Maximilian*, who ſent of politike purpoſe, a ſeruant of *Triuultios* (who ſpake the *Switzer* tong perfectly well) with fained letters vnto the Captaines of that nation, then ſeruing in *Maximilians* Campe, thereby to cauſe

Maximilian.

them to be ſuſpected and doubted, the which faining meſſenger being taken by the

the Sentinels and watches, cunningly (like *Synon* at *Troy*) humbly beseeched them his life and pardon, and that he would deliuer them certaine things which he had to deliuer vnto the Colonels and Captaines of the *Switzers*: the which being graunted him, he drew out of his shoe the deuised letter, which he carried to cause a suspition to grow vpon these Captaines: the which being seene and read by the Emperour, holding for certaine their contents to be true, and mistrusting some treason, as they had before vsed vnto *Lodowik Sforza*, raised presently his campe, and withdrew himselfe, with lesse constancy and credit, then to his honor and reputation was conuenient.

The Switzers.

Lodowike Sforza.

Also he ought to haue great industry and skill to know how to encampe his Army, and to dislodge the enemy, cutting him from victuals and other commodities; with blocking vp of all passages and straights about the besieged place, and to reknowledge and consider all the places of most strength and commoditie: wherefore it is needefull that he bee both learned and skilled in Geographie, as well of the countrey & prouince where he warreth, as of al other parts in generall; well informing himselfe of the situations and dispositions of the same, of what temperature they be, of what firtilite they are, of what thinges they abound, and of what things they want, what maner of people do inhabite thē, & those of what cōditions & maner of life; what religiō they hold, with what lawes they be gouerned, what Princes do rule them, and what power and valour they are of. All the which considerations, and many more stratagems are to be attained with learning, & often reading of histories; as by all braue Commanders which euer were yet, may well be vnderstood, and therefore let no man thinke, but that a souldier ought to be learned and read, the which conioyned with experience, makes him a perfect man of warre: and without this learning and reading a souldier may haunt many yeares the warres, and neuer attaine to the deepe points of soldierie, the which by much reading and fewer yeares of experience, may be farre better perfected: as was seene by *Lucullus* the Romaine commander, and many others of other nations.

Industrie and skill to encampe, and to dislodge the enemy.

To haue good intelligence.

Learning ioyned with experience maketh a perfect man of warre.

Lucullus the Romaine.

And also to haue the more particular skill and knowledge herein, it importeth much to haue drawne plats, mappes, and models of euery seuerall prouince, countrey, and region, with the descriptions of their mountaines, valleys, hils, champain fields, forrests, woods, riuers, brookes, fennes, lakes, pastures, and arable grounds, and whether their fields be open or inclosed, narrow or large; what straights and passages difficult to passe, what strong places and castels, what townes, cities, and boroughs, what Noble mens places, and houses of pleasure, and what distance there is betwixt place, & place; wherby to giue assured directions and traces vnto euery action they pretend and attempt; as did many of our famous Commanders in their honourable warres in *Fraunce* and *Scotland*, and as did the *Marquis de Pescara* and *Antonio de Leyua*, and other imperiall Captaines in their warres with the French, in the prouinces of *Naples*, *Lombardy*, and *Piemont*, who with a farre lesser number, badly payed, and worse preparations of war, with only industry, courage, pollicy, & boldnesse, came to atchieue many enterprises, and to great encounters, layed many *Ambuscados*, and gaue many surprises and *Camisadas* to the enemy, thereby gaining both honour and victory: as was seene in the battell of *Pauia*, where *Francis* the *French* King was taken pri-

Drawne plats, and mappes, with descriptions.

The Marquis de Pescara and Antonio de Leyua.

Industry, policy, and courage.

The battell of Pauia.

ſoner,and his Army quite ouerthrowne, with the ſtates that he held in *Italy*. The like did many of our braue Engliſh Kings in *France*, *Scotland* and other places, namely at the battell of *Poytiers*, *Agincourt* fielde ,and elſe where, where with a ſmall number of Engliſh ſouldiers, the whole ſtrength and cheualry of *Fraunce* was ouerthrowne,ſlayne ,and taken priſoners, onely by valour and martiall induſtry. All the which was performed with wonderfull diligence, ſpeede, ſecrecy, and reſolution, which bee matters of great importance in the conduction of warre.

Few numbers experienced brauely conducted,do atchiue great enterpriſes.

Gent. How ſay you, that it is a very important thing to execute the effect of warre with great ſpeede and diligence, ſith you ſaid but euen now, that it was a great point to know how to entertaine the enemy with delayes,as did *Quintus Fabius* with *Hannyball*?

Policy preferred before rigour of warre.

Battels ſubiect to a thouſand hazards.

Capt. It is true,that in good martiall diſcipline, that Generall is more to bee accounted of,and eſteemed, which knoweth how to ouercome with policy,wiſedome,ſtratagems,and prudence, then with dint of ſword and rigour of weapons. For battels are ſubiect vnto a thouſand hazards,and perils, as to the temerity and raſhneſſe of heady Captaines and ſouldiers, and vnto the cowardize ſometimes of ſome particulars;with a number of ſuch accidentall fortunes: and therefore in effect,prudence and patience, and not pride and raſhneſſe, do produce good and happy euents in warre: and therefore the Emperour *Octauius Auguſtus* did more eſteeme the kingdome of *Mauritania*, then all the other prouinces which he poſſeſt, for that he had gayned the ſame without bloud, and the king of *Naples Don Alonſo*, being chalenged by his Competitor and enemy, the Duke of *Anion* to come to battell, he refuſed the ſame, ſaying; that it was the part of a good Captaine to knowe howe to gayne, and not to come to battell at the enemies appetite.

Octauius Auguſtus.

Don Alonſo king of Naples.

The Duke de Anion.

A wiſe ſaying.

But this is principally to be vnderſtood,when a Prince is ſet vpon and diſtreſſed in his own coũtry, as was then the ſaid king *Don Alonſo*,& the caſe being ſuch, let no Prince nor Generall vſe the temeritie and raſhneſſe, as did *Lewes* the King of *Hungaria*, who ioyned in battell vnaduiſedly with *Solyman* the great *Turke*, being badly counſelled thereunto by the Archbiſhop *Tomeres*, being farre inferiour to his enemy in numbers: yea, although he were equall, yet were it better to weary him with delayes,and cauſe him by ſuch lingerings to be weary of the action; and ſo retire in fine. And therefore to this ende the Signory of *Venice* will haue their Generals to be rather warie and long delayers, then raſh and furious warriours,not ſparing any coſt to prolong the ſame,alwaies auoyding the doubtfull and vncertaine ſucceſſes of battell, yea although they hold for certaine to gaine; if it be thought to coſt much bloud, yet better to be refuſed: as *Iulius Cæſar* declared very well, ſaying: that hee ought to bee accompted an vniuſt Captaine if he did not more eſteeme the ſafety of his Army, and the life of his ſouldiers, then his owne proper commodity and life. For thoſe which do meaſure the hope of the victory, without the due conſideration of the profit or loſſe, that ſucceedes the ſame, doe deſire vaine and diſordinate things, and do find many times the euents and iſſues contrary to their thoughts: as it chaunced vnto the French at the battell of *Poytiers*, where although they were in full hope of victory, yet they loſt therein a number of their nobility,with their King and his ſonne taken

Raſhneſſe of Lewes king of Hungaria.

To weary with delayes,rather then to be raſh and furious.

The Venetians order.

Succeſſes of battels are doubtful.

Iulius Cæſars ſaying.

A good note.

Examples.

taken prisoners: and againe, as it befell the sayd French at the battell of *Rauenna*, where although they remained victors, yet they lost *Monsieur de Foyx* their Generall, and many of his braue Captaines, whereby those which remained were constrained to retire, and passe ouer the *Alpes*, with more then good speede. Therefore to entertaine the enemy with long delayes, without bringing ones selfe into the daunger of fact of armes, and to be at choise to accept or refuse the battell, if it be presented, there is to be vsed many policies, deuises, and stratagems, and to attempt the venturous effects (of necessity) speede, and diligence is to be required; as in lodging *Ambuscados*, to giue *Camisadas*, to sallie in skirmish, and to make incursions and great *Caualgados* to surprise victuals and conuoies, to preuent their allodgements, to possesse straights and passages, to cut them from victuals, and such like peeces of seruice: and especially if there be two of the enemies powers seperated the one from the other, and being necessary to fight with them before they come to ioyne; then I say, is wonderfull dispatch, speede and secrete conduction to be required: as did *Claudius Nero* a *Romaine* Captaine, when he defeated and slew *Asdruball Barquinus*, who was come out of *Spaine* into *Italy* to ioyne with his brother *Hannyball*. The like did the Duke of *Bauier*, before that fresh aydes were come to ioyne with his enemy, the Emperor *Frederik*. And as did the Duke of *Alua*, holding *Graue Lodwike* besieged within *Monts* in *Hennault*, who vnderstanding, and seeing his brother the Prince of *Orange*, comming with a strong power to relieue him, the very same night that he approched neare, gaue him a most furious *Camisado*, and slew many of his people, whereby he was enforced the next day to returne without effecting his intent. And in the conquest of any country, city, or prouince, there is also great celerity and quicke dispatch to be vsed by the Captaines, and Generals; as was performed by the Duke *de Alua*, and the *Marquis Sancta Cruz* in their *Portugall* wars, preuenting by their martiall prudence, many difficulties, not otherwise easie to be dispatched, if the *Portugals* had had more wit, valour, and counsell, then they had. And howe much this celerity in some cases doth auaile, may well be seene by the braue exploites of Sir *Francis Drake*, and Captaine *Caerleil*, at *Sant Domingo*, *Carthagena*, and *Nombre de Dios*, with other parts of the *Indies*. Sundry other examples might be recited of actions performed with celeritie, and secrecy: and for not applying quickenesse & celerity in the execution, many times actions haue bin greatly hindered, and great inconueniences haue ensued: as it happened vnto *Hannibal*; who hauing the victory and conquest of all *Italy* in his handes after the battell of *Cannas*, lost all those aduantages, only for not pursuing the aforesayd victory. But yet in all these occurrants and occasions, there is great care and consideration to be had, to conserue the Army what possible may be, and not to hazard the souldiers with daungerous assaultes; for commonly in such attempts the brauest men go to wracke, as was well to be seene among the Spaniards in the expugnation of *Haerlem*, *Mastricht*, *Sluce*, and other fortes of the low countries. And therefore *Scipio* the younger, when being perswaded by some of his Captaines to take *Numantia* by battery and assault, he aunswered them, saying: that he esteemed more the sauing of one *Romaines* life, then the killing of all those within *Numantia*; considering that the best men are commonly lost in such attempts.

Battell at Rauenna. Monsieur de foyx.

Many policies to be vsed to delay the fact of battell.

Speede and diligence in many peeces of seruice.

Ambuscados, Camisadas, Incursions, skirmishes.

Claudius Nero defeated Asdruball Barquinus.

The Duke of Bauier.

Frederik the Emperour.

Celeritie and quicke dispatch in conquest of a country.

Portugall warres.

Sir Francis Drake and Captaine Carlsil in the Indias.

Hanniball at the battell of Cannes.

Great care to be had to conserue the Army.

Desperate assault, the spoyling of braue men.

Conſtant in perils.

A Generall ought alſo to bee very conſtant in hazardes and perils; for many times it happeneth, that the determinations which men do take in pleaſant motions, and with great vigour of minde, before the very daunger; but the perill being once preſented, and when it is moſt neede to put the buſineſſe in execution, then being amazed and ſtriken with chilly feare, doe they leaue off the attemptes, and diſhonorably retire; and will by no meanes be reencouraged thereunto: as did

To contemne any daunger for to conſerue our honour.

And hee is to bee accounted an excellent Generall, which contemneth and deſpiſeth all imminent daungers, in reſpect to conſerue his reputation and honour: as many of our famous kings of England haue done, in their owne perſons, and

Exãples of brawe men.

as many times *Henry*, now preſent king of *Fraunce* and *Nauarre*, hath done in many encounters which he hath had: and as did the Countie *Lodron*, when *Caſtraneo* the Emperour *Ferdinando* his Generall forſooke the Army vnder his charge in *Hungaria*, and fled away with the moſt part of the horſemen, for feare of the *Turkes*; the ſayd Countie *Lodron* being with thoſe footemen which remained, was by them moſt humbly entreated to be their Conductor and Generall in that diſaſtred ſucceſſe, ſeeing that he, which was their Generall and Commander had ſo ſhamefully forſaken them: the which the ſayd Countie accepted with great modeſtie, vſing vnto them many graue ſpeeches, and honorable wordes, with abhorring the fowle flying away of his companion, and encouraging them brauely to defend themſelues, with their manfull reſiſting of their enemies, without imagining or thinking vpon any thing elſe, then valiantly to fight, and couragiouſly to ouercome. Then an ancient *Almaine* ſouldier, ſeeing this Countie ſo full of ſpirite, and conſtant, ſayd in gracious maner thus vnto him; My Lord, let it not ſeeme vnto you ſo great a wonder the flying away of our Generall, ſeeing that he was mounted vpon ſo gallant a courſer, as he was; which ſeemed that hee expected to ſee how his horſe would runne. Now, the Countie vnderſtanding the craftie meaning of this old ſouldier, diſmounted with all dexteritie from his horſe, and drawing out his curtilax, cut off his horſe legges, ſaying vnto them

Honorable wordes.

with a chearefull countenaunce; My good companions, and deare countreymen, this day will I be both Captaine and ſouldier, and will fight on foote euen as you doe; Performe you the partes of valiant men, for not to deceiue mine opinion of you; & gaine ye the victory, or dye moſt honorably with reuenging your deathes; and finiſhing this warre with your end and mine.

Not to be ouercome with diſordinate luſtes.

One foule vice may obſcure many vertues.

Vertue exalteth the poſſeſſors thereof.

Now to conclude with this militarie vertue: Great Commaunders and Captaines Generals, ſhould not ſuffer themſelues to bee ouerruled with diſordinate luſtes, and appetites: for in a noble perſonage one onely vice is inough to obſcure and blemiſh a number of good vertues, as was ſeene by *Alexander*, and *Philip* his father, by the fowle exceſſe of wine drinking; and by many others ſtained with ſuch other vices. And *per contra*, one ſingular vertue did wonderfully grace and exalte the poſſeſſors thereof: and if it finde foundation of Nobilitie and Illuſtrious Bloud, it frameth thereupon the *fabrica* and building of a moſt excellent Perſonage: and if it finde no ſuch foundation, yet it layeth ſufficient foundation of it ſelfe: which hath bene ſeene in many Captaines, who from baſe degree and ſtate, haue aſcended to bee great Commaunders and Princes, by their wiſe and vertuous cariage, and by their modeſtie in maners, and by their ſingular abſti-

nence

nence; whereof we haue many and ſingular examples of ſundry vertuous men: as of *Francis Sforza*, Duke of *Millan*, who imitating *Scipio Aphricanus*, would not once touch or abuſe a moſt bewtifull yong mayden, which was taken by his ſouldiers in the Caſtell of *Caſa noua*, and preſented vnto him, whom he receiued into his pauillion; being a matter of more importance to ſuppreſſe the vices inſulting in the minde, then to encounter a mightie enemy. And by this example of him ſelfe, might this Generall, and many other ſuch, which haue bene in the world, reforme their Campes; not permitting their ſouldiers and people of warre, to grow licentious, and to ſoyle themſelues in vices, ſith that nothing doth make them more effeminate, and more vnprofitable for warre then the ſame: as well appeared in the expugnation and ſacke of *Numantia*, being there ouerthrowen ſo many Conductors and Conſuls, without performing any thing: for being the *Romaine* Armie ſo corrupted with vices, vntill *Scipio Æmilianus* came to commaund; who reformed the ſame, and baniſhed all light women and bad houſewiues out of his campe, and cauſed his ſouldiers to forſake and ſhake off all kinde of curioſitie and daintineſſe, compelling them to eate their meate ſtanding, and continually to practiſe their weapons: the which reformations were of ſuch importancie and effect, that within a ſhort time after, thoſe of *Numantia* ſallying forth to skirmiſh, with their accuſtomed confidence and courage, they were conſtrained to retire, and turne their heeles: whom, at their returne into the Citie, being reprehended & blamed by their Generall, for ſo flying from the *Romanes*, whom they had ſo often before time beaten, they anſwered him, ſaying; that the *Romane* ſouldiers were the very ſame, but that their Commaunder was another, and a man of more valour and better gouernement then thoſe before paſſed.

Francis Sforza.

The good life of the Generall a paterne to reforme their Campe.

Vitious ſenſualitie effeminates the minde.

Example at Numantia.

Scipio Æmilianus reformed his Campe.

How much importeth a good Commaunder.

THE THIRD DIALOGVE.

VVherein is diſcourſed of the other two vertues, Authoritie, and Fortune; and their due ſignifications: and in fine, what Counſellours are to bee choſen, and coupled vnto the Lord high Generall of an Armie Royall: with other points.

Gentleman.

NOw, ſith you haue at large declared vnto vs the partes, apperteining vnto Militarie valour, and vertue; I pray proceede vnto the other qualities of a Generall.

Capt. The two remaining be, Authoritie, & Fortune; the which doe imitate and follow the others, as the ſhaddow doth the body. For a vertue (as I haue before declared) doth put in execution and practiſe the Militarie preceptes: and the wiſe Captaine Generall doth thereof make an habite; whereby ariſeth and ſpringeth (of neceſſitie) the fame of his valour and honorable actes; the which doth accredite him, and encreaſe to him authoritie.

Authoritie and fortune do follow militarie valour and vertue.

Gent. I vnderſtood that the authoritie in a Captaine Generall, was, to be nobly borne, and deſcended of illuſtrious bloud.

Capt. It importeth him much to bee ſuch; the better to be reſpected and fol-

It importeth much in warres to be borne of illustrious blood

lowed of those noble men and gentlemen, which doe follow the warres: for peraduẽture they would not so incline vnto him, nor obey him with such subiection, if he were not such: therefore how much nobler the personage of a Generall is, so much the more is hee obliged to adorne and furnish himselfe with the good partes and vertues which before I haue spoken of: for high title and fauour maketh not a man wise, prudent, and vertuous, if he be not such of himselfe. For by these vertues; & by his seuere punishing of the bad, & by his liberall rewarding of the good, which be two of the firmest pillers that a Generall can hold, he shall ascend vnto the top of true perfection.

Seueritie and liberalitie, two firme pillers of a Generall.

Gent. Doe you say, that a Generall is to punish with seueritie: and alwayes I haue vnderstood, that it is more securitie for Princes, to be beloued for their clemencie, then to be feared for their rigour?

Clemẽcie toward the enemy, humbly yeelded.

Capt. I vnderstand that in Martiall causes, clemencie is to be vsed towardes the enemy humbly yeelded: For, *for to conquere it is a humane thing, but to pardon and forgiue, is a thing diuine.* And in truth, none can bee termed a true victorie, if the same be not accompanied with some clemencie: and therefore *Francis* the French king, after the battell of *Pauia*, was wont to say, *That kingdomes might be conquered by force, and gained and conserued by riches, but the good fortune thereof, when it seemed most prosperous, turned her taile at pleasure (and in one moment in a maner) turned topsie turuie all that she had exalted in many yeares space.* But the preparations, occasions, and meanes how to vse this clemencie, and mercy, and thereby to aduaunce mens noble fames, is not a thing which euery Prince attaineth, and he may bee accounted in euery point happy who hath the same, and knoweth rightly how to vse it, as did our famous king *Edward* the third, and his victorious sonne *Edward* Prince of Wales, vnto king *Iohn* of *France*, and *Philip* his sonne, after the memorable battell of *Poitiers*; and as did *Philip* Duke of *Millan*, vnto *Don Alonso* of *Naples*; and the *Soldan Saladine*, vnto the Christian women in *Hierusalem*. For although the generous and haughty mindes do reioyce in victories, they do yet neuertheless grieue at others calamities: and therefore *Alexander* wept for *Darius*: and *Iulius Cæsar* for *Pompeius*: and *Marcellus* for *Syracusa*: and *Scipio* for *Numantia*.

Francis the Frẽch king.

Example of clemencie and pitie.

The rigour of iustice on whom, and where to be vsed.

A Generall to be both beloued and feared.

Hannibal

But the rigour of iustice ought to be exercised vpon the owne souldiers of the campe, and people of warre, their offences deseruing it: for in true discipline of warre, one is not to offend twise. And it importeth much for a Captaine Generall to be both beloued and feared; as was *Hannibal*, who being but a particular Gẽtleman of *Carthage*, without any other Signiories or state, & had for his great enemies, the most principall Senators of the same Republike, and the Armie vnder his charge being of sundry nations, yet is it not in writing that euer there was seene any mutinie amongst his souldiers, nor any disagreeing in so many yeares as he warred in *Spaine*, *France*, and *Italie*; by reason that he chastened with rigour the delictes and offences committed by his people of warre, and rewarded their noble actes with great liberalitie and kindnesse; and payed them their due payes alwayes in good time.

Gent. Without doubt *Hannibal* must needes be well serued and obeyed, if he payed his souldiers so royally and well.

Capt. I finde no foundation more sure and firme then to doe the same, to the end

end to haue an Armie well conducted and gouerned. For, if the ſouldiers be not payed, of neceſſitie they muſt be ſuffered to robbe, ſpoyle, raunge, and ranſack, whereby to ſuſtaine themſelues, as too too much hath bene ſeene in theſe ciuill warres of *France* and *Flanders*: the which, if they were well and duly payed, then all theſe inconueniences ſhould ceaſe; and would ſerue with more warineſſe and care, as men bound thereunto, and would feare puniſhment, if they ſhould by hap offend.

Souldiers well payed, a ſure foundation to good conduction.

Want of pay breedes many inconueniences.

Now, felicitie and good fortune, proceedes from knowledge, from fortitude, and from authoritie. For the Generall which knoweth what hee hath to doe, by skill and experience, and hath Militarie valour, to enterpriſe, and to execute with conſideration and authoritie, that thereby his ſouldiers may both beleeue him, and follow him; ſuch a one, without queſtion, ſhall haue good ſucceſſe: which is the very true felicitie and good fortune it ſelfe.

Good fortune proceedes, from experience, fortitude, and from authoritie.

Gent. I neuer vnderſtood, till now, that felicitie and good fortune did conſiſt in ſcience and knowledge: for I haue alwayes heard ſay; that fortune did moſt fauour men of leaſt wiſedome, and in fine, fooles.

Capt. Such was the opinion amongſt the Stoicke Philoſophers; cõceiuing that as there was one *Prima cauſa*, eternall, omnipotent, and of infinite wiſedome, knowen and diſcerned by the order and harmonie of his workes: ſo in like ſort, was there another *cauſa*, imprudent, fooliſh, and inconſiderate; whoſe operations were without order, or reaſon, or any wiſedome at all; for that, with an irrationall affection, it both gaue, and depriued men, of riches, dignitie and honour: the which they termed and intituled by the name of fortune; ſeeing her to bee a friend of men which did their matters, *fortè*; which is to ſay, *a caſu*, by chaunce, without conduction either of reaſon or prudence. But in very truth there is none other fortune but the prouidence of God, and the valour and abilitie of man: neither any other thing that maketh men diſaſtred, & that things ſucceede them not, according to their deſires, but onely the want of skill to practiſe their actions in due times; and with ſuch conuenient meanes as the caſes would require.

The Stoickes opinion of fortune.

There is no other fortune, but the prouidẽce of God.

Gent. Truly, me thinkes, that if a Generall ſhould obſerue the rules by you declared of theſe foure principall parts and qualities: he ſhould not fayle of good ſucceſſe in the moſt of his actions.

Capt. So thinke I alſo: preſuppoſing therewithall that hee ought to know, and vnderſtand all that which I haue ſpoken of the other officers of warre (and of much more yet vnſpoken of) ſith that they are his inferiours; to the end that he may perfectly know, how to commaund and gouerne them: for vnworthily ſhall hee commaund and gouerne in warres, which is ignorant and vnskilfull in the preceptes and rules thereof.

The Generall ought to bee skilfull in all the offices of warre.

Gent. What more yet concerneth his office?

Capt. Marry, to chuſe vnto himſelfe good Counſellours to aſſiſt him in his good gouernement: for much more needefull are the Counſels of men, wiſe and experimented in Martiall cauſes, then armour and weapons: for the greater matters are better effected with the intendement, then atchieued with the ſword, many times.

To chuſe good Counſellors and men of experiẽce.

Gent. But are not the perſonages knowne, who are to be of the Counſell of warre, by reaſon of their offices.

The Counſellours in warre ordinarily louwen.

Capt. Yea ſir: for ordinarily theſe following, bee of the ſame: Firſt the Captaine Generall of the men at armes, lances, and light horſe; 2 the Captaine Generall of the artillery, or Maiſter of the Ordinance: 3 the Camp-maiſter Generall, or Lord high Marſhall. 4 the Colonels of the Infanterie; and 5 alſo the Treaſurer of warre. But there is (moreouer) reſpect to bee had vnto other graue perſonages; and in the election of thoſe, the Generall ought to haue great conſideration, and inſight: for deepe, daungerous, and difficult matters, are to be conſulted, diſputed, and reaſoned with perfect intendements, & cleare iudgements. And therfore there is not to be admitted vnto the ſame, men of meane iudgements and of common ſenſe: for thoſe that are the Counſellours to a Prince, ought to be perſonages of great mindes, high conceites, & of equall intendement with the Prince. And that which he is particularly to conſider of them, is, to ſee that they be perfect ſouldiers, and of great experience, and men of valorous determinations: but not raſh, headie, and harebrainde: for thoſe Counſels are ſufficient honourable, which render ſecuritie vnto doubtfull affaires. And on the contrary, thoſe are moſt affrõtous, & miſerable; whẽ being enterpriſed with temeritie, onely to ſhew a vaine preſumption, and rigorous boldneſſe of minde, they are wont to diſturbe the good courſes of the honorable enterpriſes, and of the victories whereof great hope is to be had. And becauſe it is a moſt ordinarie thing amongſt Counſellors to contradict one another, and to diminiſh one anothers authoritie, he muſt bee very carefull to foreſee and procure, that they be all louing friendes together: for that, the moſt part of the ſecuritie of the campe conſiſts in their vnitie, concord, and loue: and that they all may loue him with entire affection: for hatred and feare be two bad Counſellors in warre.

Reſpect to be had to graue and ancient ſouldiers.

Men of meane iudgement and common ſenſe, not to be permitted to be Counſellours.

A particular care.

To procure a generall loue amongſt them.

Hatred & feare, are two bad Counſellors in warre.

This (Gentlemen) is all that I am able to ſay touching the officers and high Commaunders in warres: what other ſtratagems and policies of warre are, the Generall, and other high Conductors of enterpriſes, may by their owne Martiall prudence, and naturall inſtinct, inuent and put in practiſe, according to the occurrants and accidents of warre: for dayly new courſes and inuentions are found out: to anſwer the which new ſtratagemes are deuiſed, *& ſic viciſſitudo rerum.*

The end of the fift Booke.

THE

THE SIXT BOOKE OF WARRE DISCOVRSES AND MARTIAL DISCIPLINE.

The first Dialogue:

Wherein is briefly touched of the orders of our now vſed fights: the great commodity of due and skilfull trayning: the tables for the embattailing of men in graund ſquare of men: and into battallions of the ſame kind: with proportioned figures to the ſame: and arithmeticall rules to the working thereof: and a declaration of euery the ſayd tables.

Gentleman.

WEll (Captaine) ſith you haue in your former fiue bookes at large diſcourſed touching moſt martiall pointes; as well of ſouldiers, offices, officers, and Commanders, as alſo of moſt ſorts of imbattailing of men, now moſt in vſe; wherein you haue ſatisfied vs wonderfull well: yet, I pray (according to your promiſe) will you now deſcribe vnto vs their ſeuerall tables, and figures to the ſame: whereby we (which are not skilled) may reape ſome knowledge from thence: and ſo ſhall haue good cauſe to yeelde you thankes for your great paines.

A farther requeſt for figures and tables of battels.

Capt. Although that I haue in our former diſcourſes, declared (at large) of moſt ſorts of imbattailing, both auncient and moderne; yet for better declaration and vnderſtanding of the tables following, I muſt of neceſſity repeate a great part thereof againe. Touching errors found in battels (according to mine opinion) by reaſon of ſundry compound weapons within the body of the ſame, I haue ſpoken already. Wherefore now let vs conſider, and declare, what kind of battels (by reaſon) may bee held for good and firme, conſidering our now vſed fights, and the weapons moſt befitting the ſame, & ſuted in ſo good ſort as may become able to abide or performe a victory, whereunto they are appointed. Principally therfore if you will reſt vpon one ſole and entire battell, whether the ſame be ſquare of mē, or ſquare of ground, or any other proportion, or forme, as hearſt, croſſe battell, or tryangle: the which two firſt (as I haue erſt before ſayd) do at this preſent day remaine chiefly in vſe among vs: or deuide your army into many battallions of that kind, which your graund battell ſhall be formed of: then ſet your ſquadron of battell or battallions round about vnder the guard of the pikes, with ſuch number of ſhot, as ſhall be beſt fitting vnto the proportion of the ſame; according to the Sergeant Maior his appointment; either by 3, 5, or 7 ſhot in a ranke: and the reſt to be reparted into many ſmall troupes, of 30, 40, or 50 in a troupe; trouping round a-

Errors found in battell.

What kind of battels may be held for good and firme.

To frame the ſquadron of pikes only.

To empale with ſhot.

Shot deuided into ſmall troupes.

bout the battel, with a reaſonable diſtance from the ſame, to maintaine skirmiſh, which way ſoeuer the enemie approcheth. Prouiding that the ſame troupes be ſtill maintained, one to ſecond another, that the battell may be by them ſhadowed, to the end that the enemies troupes or skirmiſhers may not haue that aduantage to diſcharge vpon the body of your battell.

The ſhort weapõ to be mingled with the troupes of ſhot.

Now among theſe your troupes of ſhot, it ſhall be very behouefull to mingle ſome of your ſhort weapons, as halbards, bils, ſwords and targets, halfe pikes, and ſuch like: for there ſhall your ſhort weapon do beſt ſeruice, mixed with your naked ſhot, to backe them, if they ſhould happen to be diſtreſſed by the enemy.

Troupes of ſhot one to ſecond an other.

Your battell thus framed, girdled, and enuironed with ſhot in troupes, the which troupes, ſeconding one another, ſhall ſtill keepe your battell ſhadowed, as in the figures of all their kinds, ſet downe before their ſeuerall tables, ſhall plainely appeare: alwayes regarding that your girdling ſhot do neuer diſcharge vntill the

The girdling ſhot when to diſcharge

enemy commeth within 20, or 30, paſes of them at the leaſt; and then to diſcharge roundly vpon the face and body of the enemy. The which being performed, if they be encountred with foote, they are ſpeedily to retire vnto either flanke of the battell, or fleeued in betwixt the pikes, or if encountred with horſe, to bend downe vpon one knee, vnder the guard and ſuccour of the pike.

The rare victories of the Romaines.

Now hauing deepely conſidered the rare victories and great conqueſts of the auncient *Romaines*, atchieued (in mine opinion) by their due obſeruing of true martiall diſcipline, and great readineſſe in their politike and ſuddaine alterations of their proportions, wherewith to encounter their enemies, I find therein a moſt notable patterne of a right excellent Chiefetaine. The very circumſpection of whom, by a moſt wonderfull regard, was cauſe vnto them, of ſo many, and ſuch

The readineſſe of ſouldiers to be tranſported into any forme.

honourable victories: wherein the continuall readineſſe of their ſouldiers and people of war, to be tranſported (with all facilitie) into euerie forme, vpon anie occaſion: and the skilfull direction of their Captaines was ſuch therin, as to ſo victorious a people ſeemed to be moſt correſpondent and conuenient. The which true diſcipline, obedience, skill, and readineſſe, were it vſed (and more then it is) in this our age, I thinke warres would carry a farre better conduction then they now do.

The profit of true trayning.

This kind of readineſſe in ſouldiers, and the indeuour of a continuall vſe vnto them in the ſame, eſpecially in the time of their trainings (the which I could wiſh to be put in practiſe with vs by skilfull trainers) vpon what chaunce ſoeuer ſhold happen, hath no doubt, ſeemed vnto many, to be of no ſmall importance and force; and the rather do I ſo iudge, for that hauing ſounded the depth and commodity thereof, I find the contrary negligence to beare with it a note of moſt great imperfection. The diſpoſition whereof, leauing vnto the knowledge and

Out of the grand ſquare of men all battels to be reduced.

regard of euery good and expert Captaine, and for that I haue at large diſcourſed thereof already in my third booke of theſe military diſcourſes, I will at this preſent content my ſelfe, to ſhew vnto you the ſeuerall tables and figures of all theſe battels and battallions, with the arithmeticall rules to frame the ſame; and how that out of the grand ſquare of men, may all theſe battallions and battels be reduced, and that without any great confuſion. The practike rules whereof I haue,

In the third booke.

as I ſayd, at large ſet downe in theſe our former diſcourſes, as in the third booke may appeare: moreouer I haue in ſundry other places particularly declared and

ſhewne

the ordets of the embattailing of men now moſt in vſe, with their order of impaling with armed pikes, their diuiſions into *Maniples*, and the ready reframing of them againe into their grand ſquare, as at large in the ſayd third booke appeareth in many and diuerſe places.

Finally in the aforeſaid third booke, in folio 89, and 90, and in the fourth booke in folio 99, I haue deſcribed the order to draw your army through ſtraights, and difficult paſſages, by quartering the ſame into ſuch proportions as the ſtraights will permit: eſpecially if the enemy do conſtraine you to fight in the ſame, as moſt commonly it falleth out: alſo in the fift booke, in folio 157 is deſſigned a plat of encampement, with the arithmeticall rules of the ſame: in the conſideration of all which, the value, and waight of this readineſſe, may vnto the diligent regarders (perchance) in their ſeuerall deſcriptions, giue ſome manifeſt appearãce. *In the fift booke.*

A declaration of the tables of battels and battallions with the arithmeticall rules to worke the ſame.

In theſe tables following, I haue begun with the nũber of 10000 armed pikes; beſides the ſhot and ſhort weapons, correſpondent to theſe proportions, whereof I haue before ſufficiently ſpoken in many places: for the diuiſion of which number of armed pikes, with all numbers downe ward, I haue reduced into certaine tables the proportions of diuerſe battels, beginning with the ſquare of men from the ſaid number of 10000 pikes downward, and the ſame not decreaſing, by 50 or 100 but by roote, as firſt beginning with the ſquare roote of 10000, which is 100. The which multiplied into it ſelfe, maketh the ſaid 10000: and ſo from the roote 100 vnto 099, and then 098, next 097, and ſo from roote to roote orderly, vnto the laſt ſquare roote, which is 1. *The tables to 10000 armed pikes.* *The rules for the deuiſions of the numbers.*

In which tables I haue directed the order of marching of an army, as the paſſage or way will permit: whether you ſhall march 3, 5, 7, 9, 11, 13, 15, or 17 in a ranke, and how many rankes they ſhall be. To do the which, worke thus. Deuide the whole nũber of men by ſo many in rank, as you will haue them to march in; as by 3, 5, 7, &c. The number here I haue ſuppoſed to be 10000 men, the which 10000 to haue them to march at 3 men *per* ranke, I do deuide 3, and it produceth 3333 rankes, and 1 man remaining, as in the margine appeareth. And if you wold haue them to march by 5, 7, 9, or any other number, *per* ranke, worke as you haue done with the number 3. *The order in marching.* *The rules to the ſame.*

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2(1
10000(3333 1/3 rankes
3333(
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Then how to deuide the battell into *Maniples* or parts, and ſo to march them vpon the way as ſtrongly as the paſſage will permit; and how the *Maniples* comming vp ſhoulder to ſholder, each weapõ ioyneth with his like, making again the former ſquare battell of men, with the remaines that make not vp a iuſt *Maniple* or part: and alſo how to march thoſe ſayd remaines that they may come vp ſhoulder to ſhoulder, with the reſt of the *Maniples*, to make vp a iuſt ſquare. To do the which, worke thus: deuide the roote of your grand number of men by ſo many as you would haue them to march in a *Maniple*, and the product will be the number of *Maniples*, with the remaines (if any ſuch there bee) as for example, the ſquare roote of 10000, is 100, the which 100 men, I do deuide by 3 and it produceth 33 *Maniples*, and one ranke remaining, the which 1 ranke is 100 men, the which 100 men, marching vp by 1 in a ranke, comming vp ſhoulder to ſhoulder with the grand ſquare, maketh iuſt the ſame proportion of the grand ſquare; as in the Tables plainly may appeare: So may you worke by 5, 7, 9, 11, *To deuide it into Maniples.* *The rule to do it.*

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2(1
160(33 manip 1
33
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or any other number, to bring them into *Maniples* with their remaines. But here you ſhall note, that a *Maniple*, doth ſignifie ſo many men in ranke quite through your grand ſquare or battell, as you are diſpoſed, or be conſtrained to deuide the ſayd grand ſquare into, whereby to paſſe through any ſtraight or paſſage, & then comming vp ſhoulder to ſhoulder, do make your former ſquare of men againe.

A Maniple what it ſignifieth.

Finally in the firſt table of the ſaid ſquare of men, in proportion of equalitie, there is ſet down readily how many ſhot will girdle or impale the battell of pikes, in what forme ſoeuer you diſpoſe the ſame, whether it be by 3, 5, 7, or 9 ſhot in a ranke, which is as many as you ſhall neede to girdle withall, in mine opinion: and if you are to encounter or be charged with horſe, I ſuppoſe 3 to be ſufficient.

Shot to girdle the battell.

To do the which, worke you thus: Firſt multiplie your quadrate roote, or ſquare of men, by ſo many as you meane or bee diſpoſed to girdle the ſame withall, the product whereof will amount to the girdling ſhot for the one ſide or quarter; then againe multiplie the ſaid product by 4, for the 4 ſquares of the battell, and the product thereof ſerueth for the girdling of the ſayd 4 ſquare ſides. Now there will want to fill the 4 angles or corners, the which you muſt conſider whether you doe impale by 3, 5, 7 or 9: then to multiplie euery angle by ſo many *per* ranke, as you doe impale by: as for example: the ſquare roote of 10000 is 100; the ſayd 100 I do multiplie by 3, (for ſo many doe I ſet to impale by) and it maketh 300 for the one ſquare ſide of the battell; the which 300 I doe againe multiplie by 4, for all the 4 ſquare ſides of the battell, and it amounteth vnto 1200 ſhot: then for the foure corners or angles (conſidering that I do impale by 3) firſt I multiplie the ſayd three by it ſelfe, and it maketh 9 for one angle: and then quadruple the ſayd 9, it maketh 36, the which 36 being added vnto the aforeſayd 1200, and it amounteth in all vnto 1236 ſhot for the full impalement of your ſquadron of 100 ſquare roote of men. And ſo may you do with any other number, as in the tables will appeare more at large.

The rule to the ſame.

☉	☉	☉
1	0	0
	22	

Likewiſe on the left ſide of euery leafe of the ſayd tables, hauing firſt turned the ſame ouer, you ſhall haue oppoſite or againſt the number or battell, which ſtandeth euermore on the right ſide of the ſayd leafe, the ſame battell deuided into 3, 5, or 7 battallions; the number of which battallions in each of them conteined, you ſhall finde by drawing your finger euermore on the firſt Columne of euery leafe on the right ſide, & where you finde the number of the ſaid battalliõs, there ſhall you ſee in that diſtinctiõ betwixt two long rules, how euery battallion ſhall bee ſet, which two long rules are the ſecond Columne of the tables: As for example: the grand battell of 10000 pikes, placed on the right ſide of the leafe in the firſt Table, as in folio 16 may be ſeene, the ſayd grand battell you ſhall finde deuided into 3, 5 or 7 battallions, by turning ouer the leafe looking vpon the left ſide therof, in the ſame folio 190. Now to know the ſquare root of euery of theſe battallions, draw your finger continually down the firſt Columne of euery right ſide of the leafe, vntill you come to finde the due number of the ſayd battallions, which is, firſt 348, &c. the which nũber being found in the firſt Columne in folio 191, euen there in the ſecond Columne you ſhall ſee the ſquare roote thereof to be 59, and ſo muſt you do by the reſt of the battallions.

To deuide the grand ſquare into battallions.

The order to find in the tables how the battallions be ſet.

In the firſt Columne of the left ſide of euery leafe, is placed the grand ſquare or battell of men: in the ſecond Collumne is ſet the ſame battell deuided into 3. battallions: in the third Columne is the number of euery of their ſeuerall battal-

The order obſerued in the tables following.

lions,

lions, and in the fourth Columne is the remaines of the ſayd battallions, which is, how much they are leſſe then the grand ſquare of men: and alſo in the ſaid fourth Columne, if they do abound the number of the grand ſquare, it ſhall be there ſet downe, alwayes marked with this word (*ouer*) adioyning vnto it, which word when you do finde, then ſuppoſe that the battallions are more then the grand battell, by ſo many as that number containeth. The like order is to be obſerued in the diuiſion of them into fiue battallions, or into ſeuen battallions.

Of reducing or inducing battels or battallions out of, or into the grand ſquare of men.

As for the reducing or inducing of all battels and battallions out of, or into the grand ſquare of men, I haue before in folio 77, 78, 79, and ſo forth, at large declared; as of the battell in Diamant proportiõ, of the Triangle, of the Sheeres battell and Saw battell, & of the Croſſe battell, & battell cõpounded of many battaliõs, vnto the which I referre me: onely hereafter will I ſet down the figure & Tables of all, or the moſt of theſe, & the order to be obſerued in the ſame: as I will at the beginning of euery Table declare: but firſt I will ſhew you the declaration of euery Columne of the Tables, as here is deſcribed.

A declaration of the vſe of the Columnes, and numbers expreſſed in the Tables following.

1 The number of 1 in the firſt columne, containeth therein the number of the armed pikes of the grand battell of men.

2 The number of 2 ouer the ſecond columne, containeth in that part, the due number of the ſquare roote of the battell.

3 The number of 3 in the third columne, hath in it, the order of marching, as the ground will permit, be it by 3, 5, 7, 9. 11, 13, 15, or 17, in ranke.

4 The number of 4 containeth in that columne, the number of rankes, either by 3, 5, 7, 9, 11, 13, 15, or 17 men in a ranke.

5 The number of 5 hath in that columne, the remainders of that which maketh not vp a iuſt number of rankes.

6 The number of 6 ſheweth in that columne, the number of the *Maniples* or parts of each battell: whether they march by 3, 5, 7, 9, 11, 13, 15, or 17, in a ranke, the which marching vp ſhoulder to ſhoulder, do make the ſquare battell of men, with the enſignes in the middle *Mample* or part.

7 The number of 7 in the ſeuenth columne, ſignifieth the ſurpluſſage of armed pikes, that maketh not a iuſt *Mample*.

8 The number of 8 in the eight columne, denoteth the whole ouerplus of the armed pikes. that make not vp a full *Mample*.

9 The number of 9 in that columne, ſheweth how many ſhall march in a ranke of the ouerplus, that made not vp a iuſt *Mample* or part, which ſo marching vp ſhoulder to ſhoulder with the reſt of the *Maniples* or parts, maketh vp the iuſt ſquare of men.

10 The number of 10 in that columne, ſheweth how to girdle or impale your battell with ſhot, whether it be by 3, 5, 7, or 9, which is ſufficient to girdle any battell.

11 The number of 11 carrieth in that columne, what number of ſhot euery kinde of imbattelling or girdling will occupie in each ſeuerall battell, whether the ſame be by 3, 5, 7, or 9 in ranke of ſhot.

A declaration of the Tables of the Battallions.

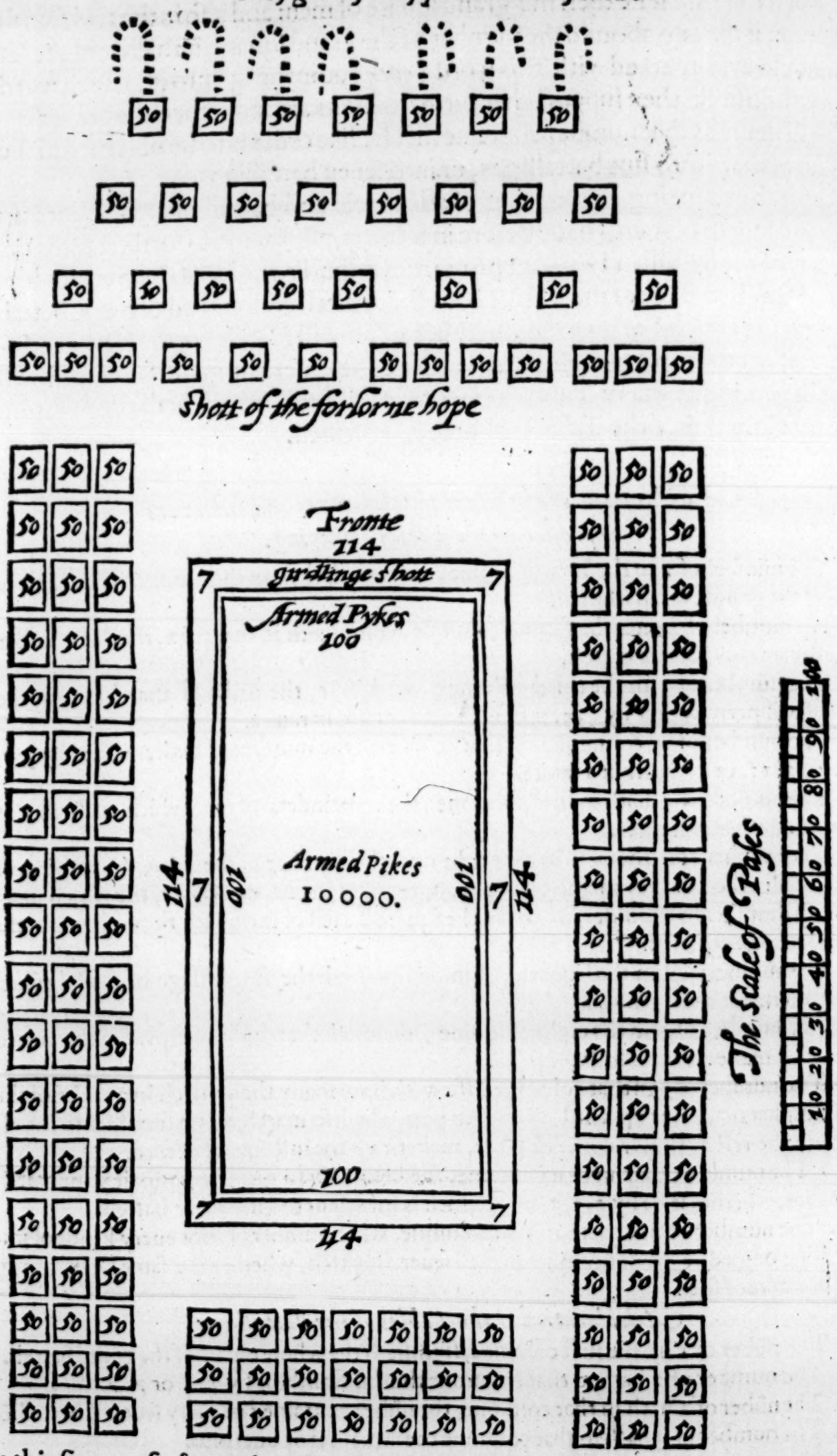
1 The nũber of 1 in the firſt columne, ſignifieth the whole nũber of the grand battell.

2 The number of 2 hath in that collumne the diuiſion, be it by 3, 5, or 7.

3 The nũber of 3 hath in that columne, the nũber contained in euery ſeuerall battalliõ.

4 The number of 4 hath in that columne the remaines or ouerplus.

The figure of the ſquare battell of men.

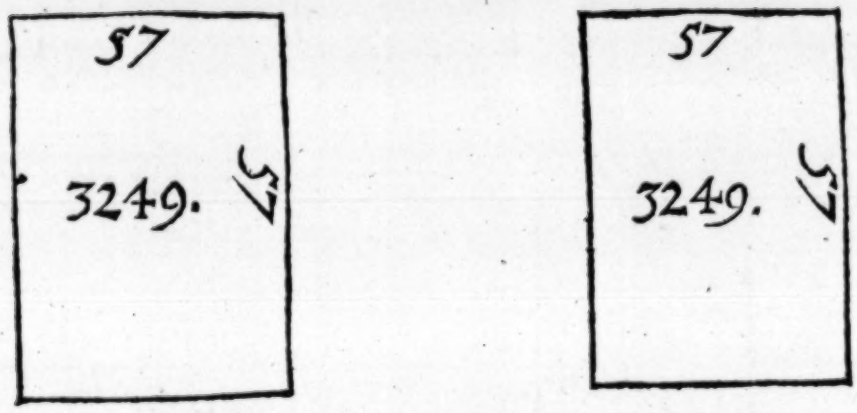


In this figure of a ſquare battell of men, there is contained 10000 armed Pikes,

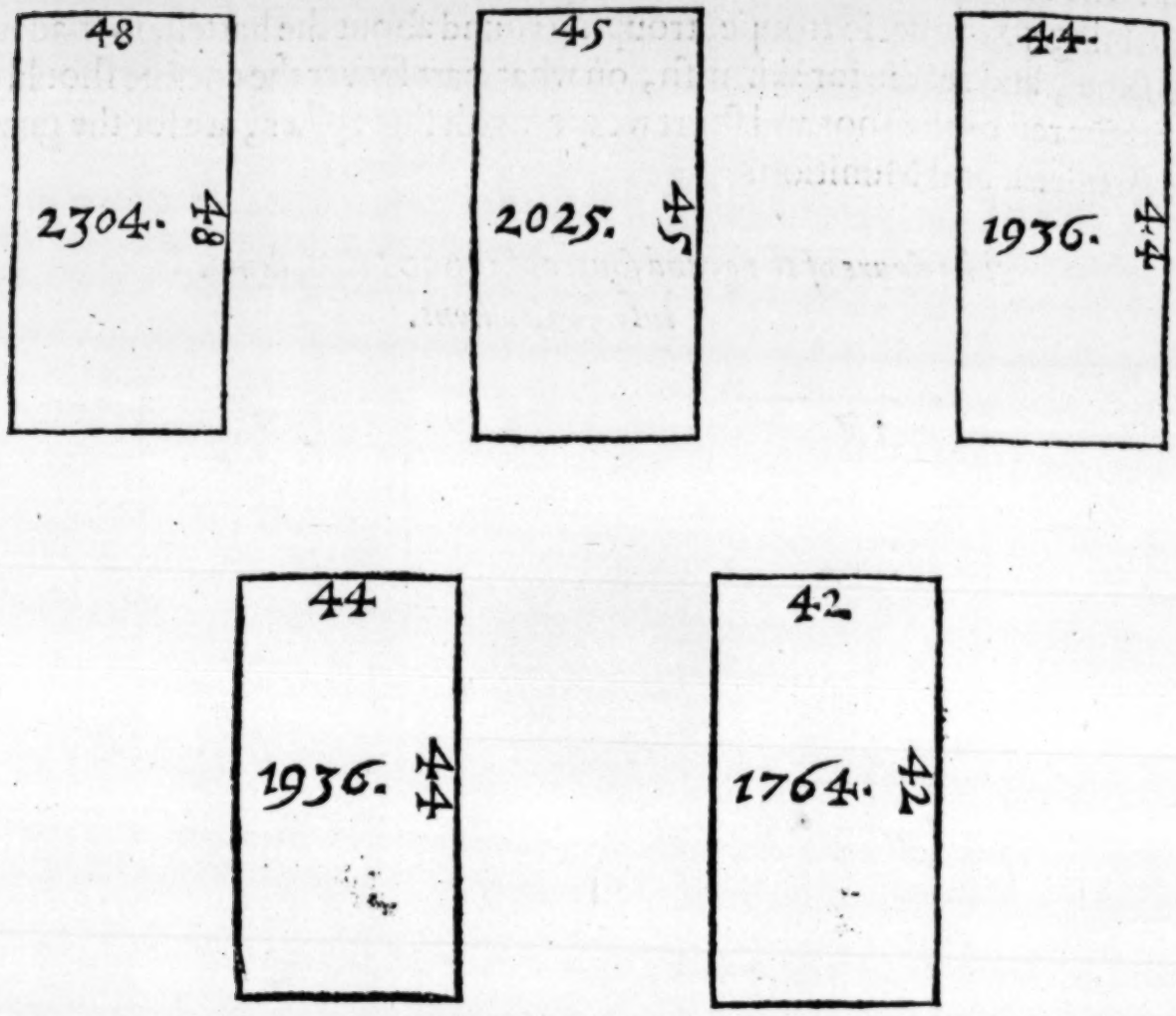
at 100

at 100 rankes, and 100 men by ranke: girdled round about with ſeuen rankes of ſhot. The reſt of the ſhot and ſhort weapon, are beſtowed in 165 ſmall troupes, containing 50 in euerie troupe, trouping round about the battell, ſo ſhadowing the ſame, and readie for skirmiſh, on what part ſoeuer the enemie ſhould offer fight: the reſt of the ſhot and ſhort weapon with ſome pikes, are for the guard of the Artillerie and Munition.

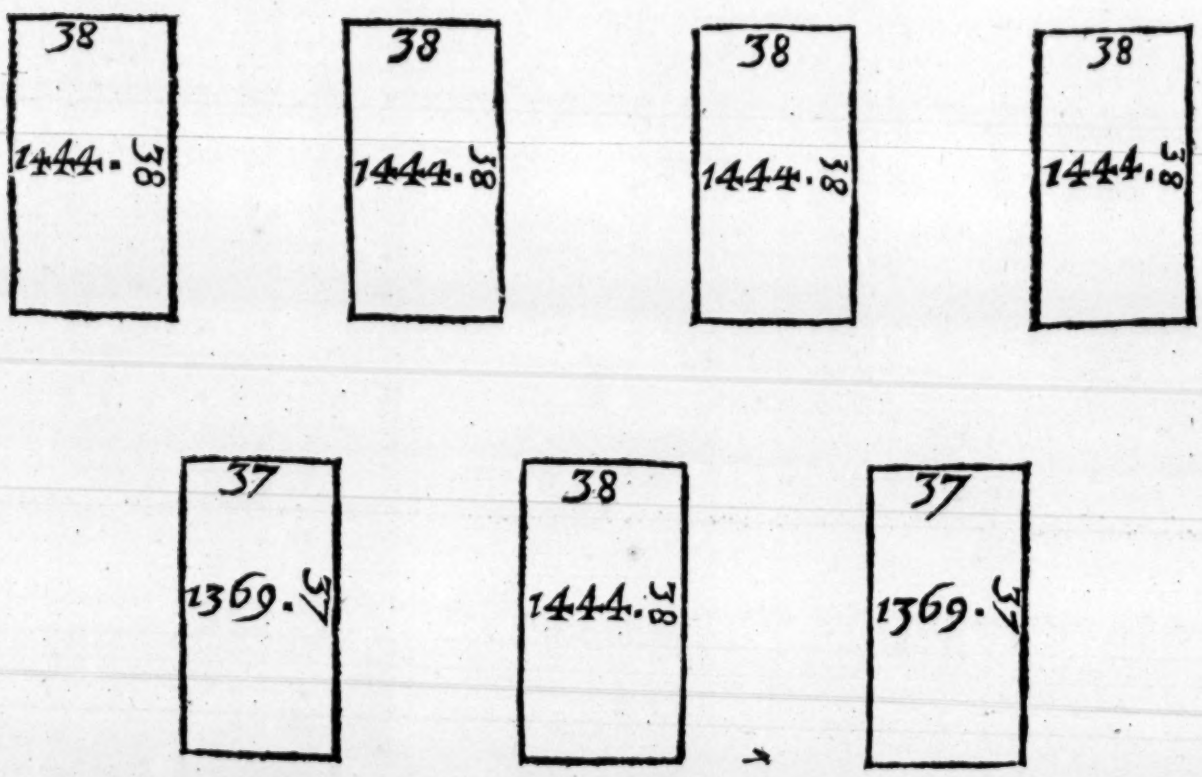
The figure of the grand ſquare of 10000 *Pikes, deuided into* 3 *battallions.*



The figure of the grand ſquare reduced into 5 Battallions.



The figure of the 7 Battallions reduced out of the grand ſquare of men.



The

The Tables of Battels in proportion of equalitie as, is 1, to 1.

1	2	3	4	5	6	7	8	9	10	11
		3	3333	1	33	1	100	1	3	1236
		5	2000	0	20	0	0	0	5	2100
	100	7	1428	4	14	2	200	2	7	2996
		9	1111	1	11	1	100	1	9	3924
10000		11	909	1	9	1	100	1		
		13	768	1	7	9	900	9		
	100	15	666	10	6	10	1000	10		
		17	588	1	5	15	1500	5		
		3	3267	0	33	0	0	0	3	1224
		5	1960	4	19	4	396	4	5	2000
	99	7	1400	1	14	1	99	1	7	2968
		9	1089	0	19	0	0	0	9	3888
9801		11	891	0	9	0	0	0		
		13	752	12	7	8	792	8		
	99	15	653	6	6	9	891	9		
		17	576	9	5	14	1384	14		
		3	3201	1	32	2	196	2	3	1212
		5	1920	4	19	3	294	3	5	2060
	98	7	1372	0	14	0	0	0	7	2940
		9	1063	1	10	8	784	8	9	3852
9604		11	873	1	8	10	986	10		
		13	738	10	7	7	866	7		
	98	15	640	4	6	8	784	8		
		17	564	0	5	13	1274	13		
		3	3136	1	32	1	97	1	3	1200
		5	1881	4	19	2	194	2	5	2040
	97	7	1344	1	13	6	582	6	7	2912
		9	1045	4	10	7	679	7	9	3816
9409		11	855	4	8	9	873	9		
		13	723	10	7	6	502	6		
	97	15	627	4	6	7	699	7		
		17	553	8	5	12	1164	12		
		3	3072	0	32	0	0	0	3	1180
		5	1843	1	19	1	96	1	5	2020
	96	7	1316	4	13	5	480	5	7	2884
		9	1024	0	10	6	576	6	9	2780
9216		11	837	9	8	8	768	8		
		13	708	12	7	5	580	5		
	96	15	614	6	6	6	576	6		
		17	542	2	5	11	1057	11		
		3	3008	1	31	2	190	2	3	1176
		5	1801	0	19	0	0	0	5	2000
	95	7	1289	2	13	4	320	4	7	2756
		9	1002	7	10	5	475	5	9	2744
9025		11	824	5	8	7	665	7		
		13	694	3	7	4	380	4		
	95	15	601	10	6	5	475	5		
		17	530	15	5	10	950	10		

The whole number of shot that do impale.	*Number of shot to impale.*	*How many pikes in ranke to march vp.*	*The whole ouerplus of pikes, after the Maniples.*	*Ranks of remainder.*	*Maniples of pikes.*	*Remainder of men.*	*Ranks how many.*	*To march in ranke.*	*The quadrate roote.*	*Number of pikes to be vnbattailed.*

The Table of Battallions of the grand square of men.

1	2	3	4	2	3	4	2	3	4
10000	3	3481 3249 3299	21	5	2340 2025 1936 1936 1764	35	7	1444 1444 1444 1444 1444 1369 1369	0
9801	3	3600 3600 2601	0	5	2500 2500 1600 1600 1600	1	7	2025 2025 1296 1296 1296 961 900	2
9604	3	3249 3136 3136	83	5	2025 2025 1849 1849 1849	7	7	1369 1369 1369 1369 1369 1369 1369	17
9409	3	3136 3136 3136	1	5	1936 1936 1849 1849 1849		7	1369 1369 1369 1369 1296 1296 1296	45
9216	3	3249 3249 2704	14	5	2116 2116 2116 1444 1444	10	7	1369 1369 1369 1296 1296 1296 1296	25
9025	3	3025 3025 2916		5	1764 1764 1764 1849 1849		7	1369 1369 1369 1225 1225 1225 1225	

The

The Table of Battels in proportions of equalitie.

1	2	3	4	5	6	7	8	9	10	11
		3	2945	1	31	1	94	1	3	1164
	94	5	1767	1	18	4	376	4	5	1980
		7	1262	2	13	3	242	3	7	2828
		9	981	7	10	4	376	4	9	3708
8836		11	803	3	8	6	564	6		
		13	679	9	7	3	282	3		
	94	15	589	1	6	4	376	4		
		17	519	13	5	9	846	9		
		3	2883	0	31	0	0	0	3	1151
	93	5	1729	4	18	3	279	3	5	1960
		7	1235	4	13	2	186	2	7	2800
		9	961	0	10	3	279	3	9	3627
8649		11	786	3	8	5	405	5	11	
		13	665	4	7	2	186	2		
	93	15	576	9	6	3	279	3		
		17	508	13	5	8	744	8		
		3	2821	1	30	2	184	2	3	1140
	92	5	1672	4	18	2	184	2	5	1940
		7	1209	1	13	1	92	1	7	2772
		9	940	4	10	2	184	2	9	3636
8464		11	769	5	8	4	368	4		
		13	651	1	7	1	92	1		
	92	15	564	4	6	2	184	2		
		17	486	2	5	7	644	7		
		3	2760	1	30	1	91	1	3	1128
	91	5	1656	1	18	1	91	1	5	1920
		7	1187	0	13	0	0	0	7	2744
		9	920	1	10	1	91	1	9	3600
8281		11	752	9	8	3	273	3		
		13	637	0	7	0	0	0		
	91	15	552	1	6	1	91	1		
		17	487	2	5	6	546	6		
		3	2780	0	30	0	0	0	3	1116
	90	5	1420	0	18	0	0	0	5	1900
		7	1157	1	12	6	540	6	7	2716
		9	900	0	10	0	0	0	9	3564
8100		11	736	4	8	2	180	2		
		13	623	1	6	12	1080	12		
	90	15	540	00	6	0	000	0		
		17	499	13	5	5	450	5		
		3	2640	1	29	2	178	2	3	1104
	89	5	1584	1	17	4	356	4	5	1880
		7	1131	4	12	5	445	5	7	2688
		9	880	1	9	8	712	8	9	3528
7921		11	720	1	8	1	89	8		
		13	609	4	6	11	979	11		
	89	15	529	13	5	14	1246	14		
		17	465	16	5	4	356	4		

The Table of Battallion to the grand square of men.

1	2	3	4	2	3	4	2	3	4
8836	3	3025 3025 2704		5	1764 1764 1764 1764 1764	62	7	1296 1296 1296 1225 1225 1225 1225	48
8649	3	2916 2916 2809	8	5	1764 1764 1764 1681 1681	5	7	1296 1296 1296 1296 1156 1156 1156	7
8464	3	2809 2809 2809	37	5	1849 1849 1849 1444 1444	29	7	1296 1296 1296 1296 1089 1089 1089	13
8281	3	3249 2500 2500	32	5	1681 1681 1681 1600 1600	38	7	1296 1296 1296 1024 1024 1024 1296	
8100	3	2704 2704 2704	12	5	1936 1936 1936 1156 1156		7	1156 1156 1156 1156 1156 1156 1156	8
7921	3	2809 2809 2304		5	1600 1600 1600 1600 1520		7	1156 1156 1156 1156 1089 1089 1089	27

The

The Tables of Battels in proportion of equalitie.

1	2	3	4	5	6	7	8	9	10	11
7744	88	3	2581	1	29	1	88	1	3	1092
		5	1548	4	17	3	264	3	5	1860
		7	1106	2	12	4	352	4	7	2260
		9	860	4	9	7	616	7	9	3492
	88	11	704	0	8	0	0	0		
		13	595	9	6	10	880	10		
		15	516	4	5	13	1144	13		
		17	455	9	5	3	264	3		
7569	87	3	2523	0	29	0	0	0	3	1080
		5	1513	4	27	2	174	2	5	1840
		7	1081	2	12	3	261	3	7	2632
		9	841	0	9	6	522	6	9	3456
	87	11	688	1	7	10	870	10		
		13	582	3	6	9	783	9		
		15	501	14	5	12	1044	12		
		17	445	4	5	2	174	2		
7396	86	3	2465	1	28	2	172	2	3	1068
		5	1479	1	17	1	86	1	5	1820
		7	1056	2	12	2	172	2	7	2604
		9	821	7	9	5	430	5	9	3420
	86	11	672	4	7	9	774	9		
		13	568	12	6	8	688	8		
		15	493	1	5	11	946	11		
		17	431	9	5	1	86	1		
7225	85	3	2408	1	28	1	85	1	3	1056
		5	1445	0	17	0	0	0	5	1800
		7	1032	1	12	1	85	1	7	2576
		9	802	7	9	4	420	4	9	3384
	85	11	656	9	7	8	680	8		
		13	555	10	6	7	585	7		
		15	481	10	5	10	850	10		
		17	425	0	5	0	0	0		
7056	84	3	2352	0	28	0	0	0	3	1044
		5	1411	1	16	4	336	4	5	1780
		7	1008	0	12	0	0	0	7	2548
		9	784	0	9	3	552	3	9	3348
	84	11	641	5	7	7	595	7	11	
		13	542	10	6	6	504	6		
		15	470	6	5	9	756	9		
		17	415	1	4	16	1244	16		
6889	83	3	2292	1	27	2	166	2	3	1032
		5	1377	4	16	3	244	3	5	1760
		7	984	1	11	6	498	6	7	2520
		9	765	4	9	2	166	2	9	3312
	83	11	626	3	7	6	504	6		
		13	529	12	6	5	415	5		
		15	459	4	5	8	664	8		
		17	405	4	4	15	1245	15		

The Table of Battallions of the battels of equall proportion.

1	2	3	4	2	3	4	2	3	4
7744	3	2401 2401 2916	26	5	1530 1530 1530 1530 1601	23	7	1156 1156 1089 1089 1089 1089 1089	13
7569	3	2704 2704 2116	45	5	1601 1601 1601 1369 1369	18	7	1089 1089 1089 1089 1089 1089 1024	11
7396	3	2500 2500 2401	5	5	1444 1444 1444 1530 1530	4	7	1089 1089 1089 1024 1024 1024 1024	33
7225	3	2681 2681 1936	7	5	1444 1444 1444 1444 1444	5	7	1089 1089 1089 1089 961 961 961	14
7056	3	2916 2916 1089	35	5	1444 1444 1369 1369 1369	61	7	1024 1024 1024 1024 1024 1024 900	12
6889	3	2916 2916 1024	33	5	1369 1369 1369 1369 1369 1369	44	7	1024 1024 1024 961 900 900 1024	32

The

The Table of Battels in proportion of equalitie.

1	2	3	4	5	6	7	8	9	10	11
		3	2241	1	27	1	82	1	3	1020
	82	5	1344	4	16	2	164	2	5	1740
		7	960	4	11	5	410	5	7	2492
6724		9	747	1	9	1	82	1	9	3276
		11	611	3	7	5	410	5		
	82	13	517	3	6	4	328	4		
		15	448	4	5	7	574	7		
		17	395	9	4	14	1148	14		
		3	2187	0	27	0	0	0	3	1008
	81	5	1312	1	16	1	81	1	5	1728
		7	937	2	11	4	324	4	7	2464
		9	729	0	9	0	0	0	9	3240
6561		11	596	5	7	4	324	4		
	81	13	504	9	6	3	243	3		
		15	437	6	5	6	486	6		
		17	385	16	4	13	1053	13		
		3	2133	1	26	2	160	2	3	996
	80	5	1280	0	16	0	0	0	5	1700
			914	2	11	3	240	3	7	2436
		9	711	1	8	8	640	8	9	3204
6400		11	581	9	7	3	240	3		
	80	13	492	4	6	2	160	2		
		15	428	4	5	5	400	5		
		17	376	8	4	12	960	12		
		3	2080	1	26	1	79	1	3	984
	79	5	1248	1	15	4	316	4	5	1680
		7	891	4	11	2	158	2	7	2408
		9	693	4	8	7	553	7	9	3168
6241		11	567	4	7	2	158	2		
	79	13	480	1	6	1	79	1		
		15	416	1	5	4	316	4		
		17	367	2	4	11	869	11		
		3	2028	0	26	0	0	0	3	972
	78	5	1216	4	15	3	234	3	5	1660
		7	869	1	11	1	78	1	7	2380
		9	676	0	8	6	468	6	9	3132
6084		11	553	1	7	1	78	1		
	78	13	468	0	6	0	0	0		
		15	405	9	5	3	234	3		
		17	322	10	4	10	780	10		
		3	1976	1	25	2	154	2	3	960
	77	5	1185	4	15	2	154	2	5	1640
		7	847	0	11	0	0	0	7	2332
		9 1/1	658	7	8	5	385	5	9	3096
5929		11	539	0	7	0	0	0		
	77	13	456	1	5	12	924	12		
		15	395	4	5	2	154	2		
		17	348	13	4	9	693	9		

The Table of Battallions of the battels of equall proportion.

1	2	3	4	2	3	4	2	3	4
6724	3	2209 2209 2304	24	5	1369 1369 1369 1296 1296	25	7	961 961 961 961 961 961 961	3
6561	3	2401 2401 1764	5	5	1369 1369 1369 1225 1225	4	7	961 961 961 961 900 900 900	17
6400	3	2116 2116 2116	12	5	1296 1296 1296 1296 1225	9	7	900 900 900 900 900 900 961	19
6241	3	2116 2116 2025		5	1296 1296 1296 1156 1156	41	7	900 900 900 900 900 900 841	
6084	3	2025 2025 2025	9	5	1025 1025 1025 1025 1156	28	7	900 900 900 900 900 784 784	20
5929	3	2304 2304 1296	25	5	1156 1156 1156 1225 1225	11	7	900 900 900 900 784 784 729	32

The

The Table of Battels in proportion of equalitie.

1	2	3	4	5	6	7	8	9	10	11
5776	76	3	1295	1	25	1	76	1	3	948
		5	1155	1	15	1	76	1	5	1620
		7	825	1	10	6	456	6	7	2324
		9	641	7	9	4	304	4	9	3060
		11	525	1	6	10	760	10		
	76	13	444	4	5	11	830	11		
		15	384	8	5	1	76	1		
		17	339	13	4	8	608	8		
5625	75	3	1875	0	25	0	0	0	3	936
		5	1125	0	15	0	0	0	5	1600
		7	803	4	10	5	375	5	7	2276
		9	625	0	8	3	225	3	9	3024
		11	511	4	6	9	675	9		
	75	13	432	9	5	10	750	10		
		15	375	0	5	0	0	0		
		17	330	15	4	7	525	7		
5476	74	3	1825	1	24	2	148	2	3	924
		5	1095	1	14	4	296	4	5	1580
		7	753	5	10	4	296	4	7	2248
		9	608	4	8	2	148	2	9	2980
		11	497	9	6	8	592	8		
	74	13	421	3	5	9	666	9		
		15	365	1	4	14	1036	14		
		17	322	2	4	6	456	6		
5329	73	3	1776	1	24	1	73	1	3	912
		5	1065	4	14	3	219	3	5	1560
		7	761	2	10	3	219	3	7	2240
		9	592	1	8	1	73	1	9	2952
		11	484	8	6	7	511	7		
	73	13	409	12	5	8	584	8		
		15	355	4	4	13	949	13		
		17	313	8	4	5	365			
5184	72	3	1728	0	24	0	0	0	3	900
		5	1036	4	14	2	144	2	5	1540
		7	740	4	10	2	144	2	7	2192
		9	567	0	8	0	0	0	9	2910
		11	471	3	6	6	432	6		
	72	13	398	10	5	7	504	7		
		15	345	9	4	12	864	12		
		17	304	16	4	4	288	4		
5041	71	3	1680	1	22*	2	142	2	3	888
		5	1008	1	14	1	71	1	5	1520
		7	720	1	10	1	71	1	7	2184
		9	560	1	7	8	568	8	9	2888
		11	458	3	6	5	355	5		
	71	13	387	10	5	6	426	6		
		15	336	1	4	11	781	11		
		17	296	9	4	3	213	3		

The Table of Battallions of the battels of equall proportion.

1	2	3	4	2	3	4	2	3	4
5776	3	2304 2304 1156	12	5	1156 1156 1155 1156 1156	4	7	841 841 841 841 841 784 784	3
5625	3	2304 2304 1024	ouer 7	5	1089 1089 1089 1156 1156	46	7	784 784 784 784 784 841 841	23
5476	3	1764 1764 1936	12	5	1089 1089 1089 1089 1089	33	7	784 784 784 784 784 784 784	12
5329	3	1764 1764 1764	33	5	1089 1089 1089 1024 1024		7	784 784 784 784 729 729 729	2
5184	3	1936 1600 1600	48	5	1024 1024 1024 1024 1089	1	7	784 729 729 729 729 729 729	26
5041	3	1681 1681 1681	2	5	1024 1024 1024 961 961	47	7	729 729 729 729 729 729 676	9

The

The Table of Battels of proportion of equalitie.

1	2	3	4	5	6	7	8	9	10	11
4900	70	3	1633	1	23	1	70	1	3	876
		5	980	0	14	0	0	0	5	1500
		7	700	0	10	0	0	0	7	2136
		9	544	4	7	7	490	7	9	2844
		11	445	5	6	4	280	4		
	70	13	376	12	5	5	350	5		
		15	326	10	4	10	700	10		
		17	288	4	4	2	140	2		
4761	69	3	1587	0	23	0	0	0	3	864
		5	952	1	13	4	276	4	5	1480
		7	680	1	9	6	414	6	7	2118
		9	551	2	7	6	414	6	9	2808
		11	432	9	6	3	207	3		
	69	13	366	3	5	4	276	4		
		15	316	6	4	9	621	9		
		17	280	1	4	1	69	1		
4624	68	3	1541	1	22	2	136	2	3	852
		5	924	4	13	3	204	3	5	1480
		7	632	0	9	5	340	5	7	2090
		9	513	7	7	5	340	5	9	2772
		11	420	4	6	2	136	2		
	68	13	355	9	5	3	204	3		
		15	308	4	4	8	544	8		
		17	272	0	4	0	0	0		
4489	67	3	1496	1	22	1	67	1	3	840
		5	897	4	13	2	134	2	5	1440
		7	641	2	9	4	268	4	7	2062
		9	498	7	7	4	268	4	9	2736
		11	408	1	6	1	67	1		
	67	13	345	4	5	2	134	2		
		15	299	4	4	7	469	7		
		17	264	1	3	16	1072	16		
4356	66	3	1452	0	22	0	0	0	3	820
		5	871	1	13	1	66	1	5	1420
		7	622	2	9	3	198	3	7	2034
		9	472	8	7	3	198	3	9	2700
		11	396	0	6	0	0	0		
	66	13	355	1	5	1	66	1		
		15	290	6	4	6	396	6		
		17	256	4	3	15	990	15		
4225	65	3	1408	1	21	2	130	2	3	816
		5	845	0	13	0	0	0	5	1400
		7	603	4	9	2	130	2	7	2006
		9	469	4	7	2	130	2	9	2664
		11	384	1	5	10	650	10		
	65	13	325	0	5	0	0	0		
		15	281	10	4	5	325	5		
		17	248	9	3	14	910	14		

The Table of Battallions of the battels of euen ſquare.

1	2	3	4	2	3	4	2	3	4
4900	3	1600 1600 1681	19	5	1024 1024 1024 900 900	28	7	729 729 729 729 676 625	7
4761	3	1520 1520 1520	20	5	961 961 961 961 900	28	7	676 676 676 676 676 676 676	29
4624	3	1521 1521 1521	34	5	961 961 900 900 900	2	7	676 676 676 676 676 676 625 625	
4489	3	1444 1444 1600	1	5	900 900 900 900 841	48	7	676 676 625 625 625 625 625	12
4356	3	1444 1444 1444	24	5	961 961 961 739 739	5	7	625 625 625 625 625 625 625	19
4252	3	1369 1369 1369	43	5	841 841 841 841 841	20	7	625 625 625 625 625 676 676	3

The Table of Battels in proportion of equalitie.

1	2	3	4	5	6	7	8	9	10	11
		3	1365	1	21	1	64	1	3	804
	64	5	819	1	12	4	256	4	5	1380
		7	585	1	9	1	64	1	7	1976
4096		9	455	1	7	1	64	1	9	2628
		11	372	4	5	9	576	9		
	64	13	315	1	4	12	768	12		
		15	273	1	4	4	256	4		
		17	240	16	3	13	832	13		
		3	1323	0	21	0	0	0	3	792
	63	5	0791	4	12	3	189	3	5	1360
		7	567	0	9	0	0	0	7	1946
3969		9	441	2	7	0	0	0	9	2592
		11	360	9	5	8	504	8		
	63	13	305	4	4	11	693	11		
		15	264	9	4	3	189	3		
		17	223	8	3	12	756	12		
		3	1281	1	20	2	124	2	3	780
	62	5	768	4	12	2	124	2	5	1340
		7	549	1	8	6	372	6	7	1918
3844		9	427	1	6	8	496	8	9	2556
		11	349	5	5	7	434	7		
	62	13	295	9	4	10	620	10		
		15	256	4	4	2	124	2		
		17	226	2	3	11	682	11		
		3	1240	1	20	1	61	1	3	768
	61	5	744	1	12	1	61	1	5	1320
		7	531	4	8	5	305	5	7	1904
		9	413	4	6	7	427	7	9	2520
3721		11	338	3	5	6	366	6		
		13	286	3	4	9	549	9		
	61	15	248	1	4	1	61	1		
		17	218	3	3	10	610	10		
		3	1200	0	20	0	0	0	3	756
	60	5	720	0	12	0	0	0	5	1300
		7	514	2	8	4	240	4	7	1862
3600		9	400	0	6	6	360	6		
	60	11	327	3	5	5	300	5		
		3	1160	1	19	2	118	2	3	744
	59	5	696	1	11	4	236	4	5	1280
		7	497	2	8	3	177	3	7	1834
3481		9	386	7	6	4	296	4		
	59	11	316	5	5	4	236	5		
		3	1121	1	19	1	58	1	3	732
	58	5	672	4	11	3	174	3	5	1260
		7	480	4	8	2	116	2	7	1806
3369		9	373	7	6	4	232	4		
	58	11	305	9	5	3	174	3		
		3	1083	0	19	0	0	0	3	720
	57	5	649	4	11	2	114	2	5	1240
		7	401	1	8	1	57	1	7	1778
3249		9	378	3	6	3	171	3		
	57	11	295	4	5	2	114	2		

The Tables of Battallions to the battels of euen ſquares.

1	2	3	4	2	3	4	2	3	4
4096	3	1369 1369 1369	11	5	784 841 841 841 784	5	7	576 576 576 576 576 576 625	15
3969	3	1225 1369 1369	6	5	784 784 784 784 841	8	7	576 576 576 576 576 529 529	31
3844	3	1296 1296 1225	27	5	784 784 784 739 739	14	7	576 576 576 529 529 529 529	
3721	3	1225 1225 1225	46	5	739 739 739 739 739	26	7	529 529 529 529 529 529 529	18
3600	3	1225 1225 1156	6	5	739 739 739 676 676	31	7	529 529 529 529 529 484 484	13
3481	3	1156 1156 1156	13	5	676 676 676 676 739	35			
3364	3	1089 1089 1156	9	5	676 676 625 625 625	35			
3249	3	1089 1089 1089	1	5	676 676 625 625 625	11			

The Table of Battels in proportion of equalitie.

1	2	3	4	5	6	7	8	9	10	11
3136	56	3	1045	1	18	2	112	2	3	708
		5	627	1	11	1	56	1	5	1140
		7	448	0	8	0	0	0	7	1750
	56	9	344	4	6	2	112	2		
		11	285	1	5	1	56	1		
3925	55	3	1008	1	18	1	55	1	3	696
		5	605	0	11	0	0	0	5	1220
		7	432	1	7	6	330	6	7	1722
	55	9	336	1	6	1	55	1		
		11	275	0	5	0	0	0		
2916	54	3	972	0	18	0	0	0	3	684
		5	583	1	10	4	216	4	5	1200
		7	416	4	7	5	270	5	7	1694
		9	324	0	6	0	0	0		
	54	11	265	1	4	10	540	10		
2809	53	3	936	1	17	2	106	2	3	672
		5	561	4	10	3	159	3	5	1180
		7	401	2	7	4	212	4	7	1666
		9	312	1	5	8	424	8		
	53	11	255	4	4	9	477	9		
2704	52	3	901	1	17	1	52	1	3	660
		5	540	4	10	2	104	2	5	1160
		7	386	2	7	3	156	3	7	1638
		9	300	4	5	7	364	7	9	2164
	52	11	245	9	4	8	416	8		
2601	51	3	867	0	17	0	0	0	3	648
		5	520	1	10	1	51	1	5	1140
		7	371	4	7	2	102	2	7	1610
		9	289	0	5	6	306	6		
	51	11	236	5	4	7	357	7		
2500	50	3	833	1	16	2	100	2	3	636
		5	500	0	10	0	0	0	5	1120
		7	359	1	7	1	50	1	7	1582
		9	277	7	5	5	250	5		
	50	11	227	3	4	6	300	6		
2401	49	3	800	1	16	1	49	1	3	624
		5	480	1	9	4	196	4	5	1100
		7	343	0	7	0	0	0	7	2554
		9	266	7	5	4	196	4		
	49	11	218	3	4	5	245	5		
2304	48	3	786	0	16	0	0	0	3	612
		5	460	4	9	3	144	3	5	1080
	48	7	329	1	6	6	288	6	7	1526
2209	47	3	736	1	15	2	94	2	3	600
		5	441	4	9	2	94	2	5	1060
	47	7	315	4	6	5	235	5	7	1498
2116	46	3	705	1	15	1	46	1	3	588
		5	425	1	9	1	46	1	5	1040
	46	7	302	2	6	4	184	4	7	1470

The Tables of Battallions of the battels of euen ſquares of men.

1	2	3	4	2	3	4
3136	3	1024 1024 1089		5	625 625 625 625 625 625	
3025	3	1024 1024 961		5	625 625 625 576 576	
2916	3	1024 961 900	14	5	576 576 576 576 576	
2809	3	961 961 900	13	5	576 576 576 529 529	
2704	3	900 900 900	4	5	529 529 529 529 576	
2601	3	900 841 841	19	5	529 529 529 529 484	
2500	3	841 841 784	34	5	529 529 529 441 441	31
2401	3	841 784 784	8	5	484 484 484 484 441	24
2304	3	784 784 739	3	5		
2209	3	739 739 739	8			
2116	3	739 739 625	13			

The

The Table of Battels in proportion of equalities.

1	2	3	4	5	6	7	8	9	10	11
2025	45	3	675	0	15	0	0	0	3	576
		5	405	0	9	0	0	0	5	1000
	45	7	289	2	6	3	135	3		
1936	44	3	646	1	1	2	88	2	3	564
		5	387	1	8	4	176	4	5	980
	44	7	276	4	6	2	88	2		
1849	43	3	516	1	14	1	43	1	3	555
		5	369	4	8	3	129	3	5	980
	43	7	264	1	6	1	43	1		
1764	42	3	588	0	14	0	0	0	3	540
		5	352	4	8	2	84	2	5	940
	42	7	252	0	6	0	0	0		
1681	41	3	500	1	13	2	82	2	3	528
		5	356	1	8	1	41	1	5	940
	41	7	240	1	5	6	246	6		
1600	40	3	53[illegible]	1	13	1	40	1	3	516
		5	320	0	[illegible]	0	0[illegible]	0	5	900
	40	7	228	4	5	5	200	5	0	4
1521	39	3	316	0	13	0	006	0	3	504
		5	306	0	7	4	156	4	5	880
	39	7	218	4	5	4	156	4	7	
1444	38	3	481	1	12	2	76	2	3	492
		5	288	4	7	3	114	3	5	860
	38	7	206	2	5	3	114	3		
1369	37	3	456	1	12	1	37	1	3	480
		5	273	4	7	2	74	2	5	840
	37	7	194	3	5	2	74	2		
1296	36	3	432	0	12	0	0	0	3	468
		5	259	1	7	1	36	1	5	820
	56	7	185	1	5	1	36	1		
1225	35	3	408	1	1	2	70	2	3	456
		5	245	0	7	0	0	0	5	800
	35	7	175	0	5	0	0	0	0	
1156	34	3	385	1	11	1	34	1	3	444
		5	231	1	6	4	136	4	5	780
	34	7	163	5	4	6	204	6		
1089	33	3	363	0	11	0	0	0	3	432
		5	217	4	6	3	99	3	5	760
	33	7	155	4	4	5	165	5		
1024	32	3	341	1	10	2	64	2	3	420
		5	204	4	6	2	64	2	5	740
	32	7	146	2	4	4	128	4	7	
961	31	3	320	1	10	1	31	1	3	408
			192	1	6	1	31	1	5	720
	31	7	137	2	4	3	93	3		
900	30	2	300	0	10	0	0	0	3	396
			180	0	6	0	0	0	5	700
	30	7	128	4	4	2	60	2		

The

The Tables of Battallions to the battels of euen squares of men.

1	2	3	4
2025	3	676 676 676	3
1936	3	625 625 676	10
1849	3	625 625 676	23
1764	3	576 576 576	38
1681	3	576 576 529	
1600	3	529 529 529	13
1521	3	529 529 441	23
1444	3	484 484 484	81
1369	3	441 441 484	65
1296	3	441 441 400	14
1225	3	441 400 361	23
1156	3	400 400 324	32
1089	3	361 361 361	6
1024	3	361 324 324	16
961	3	324 324 289	24
900	3	324 289 289	2

The

The Table of Battels in proportion of equalitie.

1	2	3	4	5	6	7	8	9	10	11
841	29	3	280	1	9	2	58	2	3	384
	29	5	168	1	5	4	116	4	5	680
		7	120	1	4	1	29	1		
784	28	3	261	1	9	1	28	1	3	372
	28	5	156	4	5	3	84	3	5	660
		7	112	0	4	0	0	0	0	
729	27	3	243	0	9	0	0	0	3	360
	27	5	145	4	5	2	54	2	5	640
676	26	3	225	1	8	2	52	2	3	348
	26	5	135	1	5	1	26	1	5	620
625	25	3	208	1	8	1	25	1	3	336
	25	5	125	0	5	0	0	0	5	600
576	24	3	192	0	8	0	0	0	3	324
	24	5	115	1	4	4	96	4	5	580
529	23	3	176	1	7	2	46	2	3	312
	23	5	105	4	4	3	69	4	5	
484	22	3	161	1	7	1	22	1	3	300
	22	5	96	3	4	2	44	2		
441	21	3	147	0	7	0	0	0	3	288
	21	5	88	1	4	1	21	1		
400	20	3	133	1	6	2	40	2	3	276
	20	5	80	0	4	0	0	0		
361	19	3	120	1	6	1	19	1	3	264
	19	5	72	1	3	4	76	4	0	
324	18	3	108	0	6	0	0	0	3	252
	18	5	64	4	3	3	54	3		
289	17	3	96	1	5	2	34	2	3	240
	17	5	57	4	3	2	34	2		
256	16	3	85	1	5	1	16	1	3	228
	16	5	51	1	3	1	16	1		
225	15	3	75	0	5	0	0	0	3	216
	15	5	45	0	3	0	0	0		
196	14	3	65	1	4	2	28	2	3	204
	14	5	39	1	2	4	56	4		
169	13	3	56	1	4	1	13	1	3	192
	13	5	33	4	2	3	39	3		
144	12	3	48	0	4	0	0	0	3	180
	12	5	28	4	2	2	24	2		
141	11	3	40	1	3	2	22	2	3	168
	11	5	24	1	2	1	11	1		
100	10	3	33	1	3	1	10	1	3	156
	10	5	20	0	2	0	0	0	0	
81	9	3	27	0	3	0	0	0	3	144
	9	5	16	1	1	4	36	4		
64	8	3	21	1	2	2	16	2		
	8	5	12	4	1	3	24	3		
49	7	3	16	1	2	1	7	1		
	7	5	9	4	1	2	14	2		

The Table of Battallions, reduced out of the grand ſquare of men.

1	2	3	4
841	3	289 289 256	7
784	3	256 256 256	16
729	3	256 256 225	8
676	3	225 225 225	1
625	3	225 196 196	8
576	3	196 196 196	15
529	3	196 169 169	5
484	3	169 144 144	17
441	3	144 144 144	9
400	3	144 144 121	9
361	3	121 121 121	2
324	3	121 100 100	3
289	3	100 100 81	8
256	3	81 81 81	13
225	3	81 81 64	1
196	3	64 64 64	4
169	3	64 64 49	8
144	3	49 49 49	3
121	3	49 36 36	6
100	3	36 36 25	3

The end of the Table of Battallions reduced out of the battels of 9. and ſquares of men: vpon the right ſide of euery leafe.

The

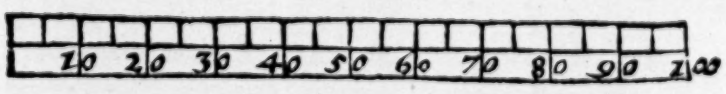
The Table of Battels in proportion of equalitie.

1	2	3	4	5	6	7	8	9	10	11
	6	3	12	0	2	0	0	0		
36	6	5	7	1	1	1	6	1		
	5	3	8	1	1					
25	5	5	5	0	0					
	4	3	5	1	0					
16	4	5	3	1	1	1	4	1		
	3	3	3	0						
9	3	5	1	4	36	4				
	2	3	1	1						
4	2	5	0	0						
	1	0								
1	1									
The whole number of armed pikes.	The quadrate, or square roote.	Per ranke to march by:	Rankes how many.	Remaines of rankes.	Maniples, or partes.	Remaines of pikes by ranke.	The whole ouer plus of remaines.	How many to march in rankes of remaine.	The rankes to impale by.	The number of shot that impale.
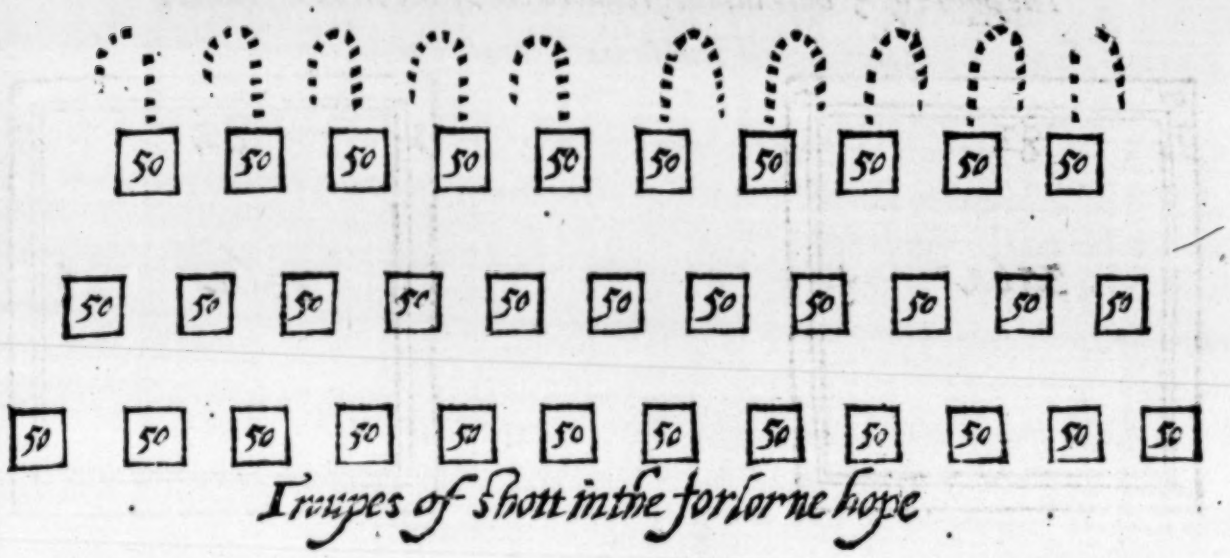
Here endeth the Tables of Battels in proportion of equalitie, or the Battels of due square of men: that is, how many rankes, so many men by ranke; or how many rankes, so many files.

Hereafter enſueth the Tables and figures of two fold Battels; called broad ſquares or hearſt *Battels: with the Battallions of that kinde.*

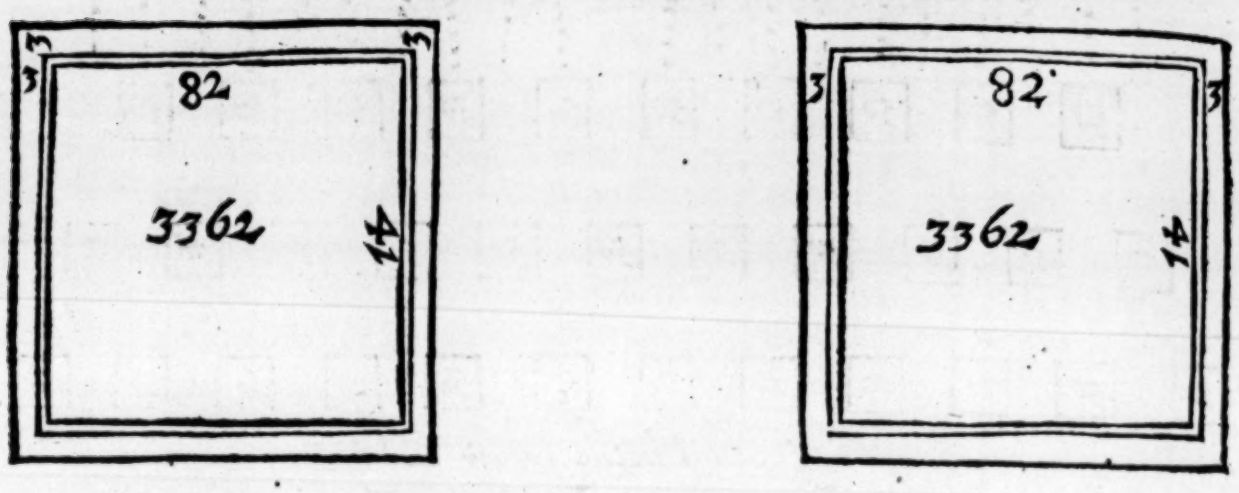
IN theſe Tables enſuing, I haue ſet downe the order and ſetting of ſundry Battels in proportiõ of inequalitie, as 2, vnto 1, that is, twiſe ſo many men in front as in flanke, the which ſort of Battels do come to cõtaine neare a iuſt ſquare or quadrate of ground, which the battels of proportiõ of equalitie (that is ſo many mẽ in flank as in front) doe not: for they containe in ground, twiſe and more the quantitie of ground, in flanke or length that they doe in front or breadth; the reaſon and order thereof I haue in my 3. booke, in fol. 45, 46 &c. & 50 at large declared, & ſo cõtinuing, ſhewing therein, rules Arithmeticall to ſet all ſuch ſortes of Battels, & their impalement with armed pikes; and diuiſions into *Maniples*: here onely contenting my ſelfe with ſetting forth the figures and Tables of the ſayd Battels in proportion of inequalitie; and how they are to be ordered into ranks for marching, & into *Maniples*, and girdling with ſhot, as before in the Tables of ſquares of mẽ, or Battels in proportion of equalitie, is at large ſet downe and declared. And alſo on the left ſide of euery leafe is ſet downe the ſaid Battels or broad ſquares, deuided into ſundry battallions of that kinde, as into 3 or 5 battallions: the number of which battallions in each of them contained, you ſhall finde euermore in the firſt Columne of euery leafe on the right ſide; & where you find the number of your battallions, there ſhall you ſee, betwixt two long rules in that diſtinction (placed in the 2 Columne) how euery battallion ſhall be ſet in front & flanke, which is the iuſt ſquare roote of euery battallion. Finally, I haue here before you ſet downe firſt, the figure of the ſayd broad ſquare of men, or Battell in proportion of inequalitie, as 2 vnto 1, which commeth to containe, neare the iuſt quadrat of ground, girdled round about with 7 rankes of ſhot; and the reſt of the ſhot, and ſhort weapon due to this number and proportion of pikes, are deuided into ſundry troupes of 50, in euery troupe, trouping round about the maine Battell; as I haue done before in the figure of the iuſt ſquare of men. I haue here alſo deſſeigned in figure the ſaid broad ſquare or hearſt Battell, deuided into ſundry battallions of that kinde, as firſt into 3 battallions, then into 5 battallions, as in page 212 may appeare: each battallion is girdled with 3 rankes of ſhot; the reſt of the ſhot and ſhort weapon belonging vnto the ſayd numbers, may bee placed in ſundry ſmall troupes, as is in the broad ſquare, trouping round about the ſame: or as the Sergeant Maior ſhall otherwiſe thinke good: or as the ground will permit, or occaſions offered to fight.



The figure of a Broad square Battell trouped round about with shot.



The figure of 3 Battallions, reduced out of the Broade ſquare.



The figure of fiue Battallions, reduced out of the Broade ſquare.



The

The Table of Broad square, or twyfold Battels.

1	2	3	4	5	6	7	8	9	10	11
10082	71	3	3360	2	47	1	71	1	3	1314
		5	2016	3	28	2	142	2	5	2230
		7	1440	3	20	2	142	2	7	3178
	142	9	1120	3	15	7	497	7	9	4158
		11	916	7	12	10	710	10		
9800	70	3	3266	2	46	2	140	2	3	1296
		5	1980	0	28	0	0	0	5	2200
		7	1400	0	20	0	0	0	7	3136
		9	1088	8	15	5	350	5	9	4104
	140	11	890	10	12	8	560	12		
9522	69	3	3174	0	46	0	0	0	3	1278
		5	1904	2	27	3	207	3	5	2170
		7	1360	2	19	5	345	5	7	3094
		9	1058	0	15	3	207	3	9	4050
	138	11	865	7	12	6	414	6	11	5038
9248	68	3	3082	2	45	1	68	1	3	1260
		5	1849	3	27	1	68	1	5	2140
		7	1321	1	19	3	204	3	7	3052
		9	1027	0	15	1	68	1	9	3996
	136	11	840	8	12	4	272	4		
8978	67	3	2992	2	44	2	134	2	3	1242
		5	1795	3	26	4	268	4	5	2110
		7	1282	4	19	1	67	1	7	3010
		9	977	5	14	8	546	8	9	3942
	134	11	816	2	12	2	134	2		
8712	66	3	2904	0	44	0	0	0	3	1224
		5	1742	2	26	2	132	2	5	2080
		7	1230	2	18	6	396	6	7	2968
		9	968	0	14	6	396	6	9	3088
	132	11	792	0	12	0	0	0		
8450	65	3	2815	2	43	1	65	1	3	1206
		5	1690	0	26	0	0	0	5	2050
		7	1207	1	18	4	260	4	7	2926
		9	938	8	14	4	260	4	9	3834
	130	11	768	2	11	9	585	9		
8192	64	3	2730	2	42	2	128	2	3	1188
		5	1638	2	25	3	192	3	5	2020
		7	1170	2	18	2	128	2	7	2884
		9	910	2	14	2	128	2	9	3780
	128	11	744	8	11	7	449	7		
7938	63	3	2646	0	42	0	0	0	3	1170
		5	1580	3	25	1	63	1	5	1990
		7	1134	0	18	0	0	0	7	2842
		9	882	0	14	0	0	0	9	2726
	126	11	721	7	11	5	315	5		
7688	62	3	2562	2	41	1	62	1	3	1152
		5	1537	3	24	4	248	4	5	1960
		7	1098	2	17	5	310	5	7	2800
		9	854	2	13	7	434	7	9	3670
	124	11	698	10	11	3	186	3		

The Tables of Battallions reduced out of the Broad squares.

1	2	3	4	2	3	4
10082	3	3362 3362 3362	3	5	1922 1922 1922 1922 2312	83
9800	3	3200 3200 3362	38	5	2048 2048 2048 1800 1800	56
9522	3	3200 3200 3042	78	5	1922 1922 1922 1922 1800	34
9248	3	3042 3042 3200	36	5	1800 1800 1800 1922 1922	4
8978	3	3042 3042 2888	6	5	1922 1922 1922 1922 1250	40
8712	3	2888 2888 2888	48	5	1800 1800 1800 1800 1458	54
8450	3	2888 2738 2738	86	5	1682 1682 1682 1682 1682	40
8192	3	2738 2738 2738	ouer 22	5	1682 1682 1682 1568 1568	10
7938	3	2738 2592 2592	16	5	1568 1568 1568 1568 1568	16
7688	3	2592 2592 2450	64	5	1568 1568 1568 1568 1352	69

The

The Table of Broad square of men, or twofold Battels.

1	2	3	4	5	6	7	8	9	10	11
7442	61	3	2480	2	40	2	122	2	3	1134
		5	1488	2	24	2	122	2	5	1930
		7	1063	1	17	3	183	3	7	2758
	122	9	826	8	13	5	305	5	9	3616
		11	676	6	11	1	61	1		
7200	60	3	2400	0	40	0	0	0	3	1116
		5	1440	0	24	0	0	0	5	1900
		7	1028	4	17	1	60	1	7	2716
		9	800	0	13	3	180	3	9	3562
	120	11	654	6	10	10	600	10		
6962	59	3	2320	2	39	1	59	1	3	1098
		5	1392	2	27	3	177	3	5	1870
		7	994	4	16	6	354	6	7	2674
		9	773	5	13	1	59	1	9	3508
	118	11	632	10	10	8	472	8		
6728	58	3	2242	2	38	2	116	2	3	1080
		5	1345	3	23	1	58	1	5	1840
		7	961	1	16	4	232	4	7	2632
		9	742	5	12	8	464	8	9	3454
	116	11	611	7	10	6	348	6		
6498	57	3	2166	0	38	0	0	0	3	1062
		5	1299	3	22	4	228	4	5	1810
		7	928	2	16	2	114	2	7	2590
		9	722	0	12	6	342	6	9	3400
	114	11	590	8	10	4	228	4		
6272	56	3	2090	2	37	1	56	1	3	1044
		5	1254	2	22	2	112	2	5	1780
		7	896	0	16	0	0	0	7	2548
		9	696	8	12	4	224	4	9	3346
	112	11	570	2	10	2	112	2		
6050	55	3	2016	2	36	2	110	2	3	1026
		5	1210	0	22	0	0	0	5	1750
		7	864	2	15	5	275	5	7	2506
		9	672	2	12	2	110	2	9	3292
	110	11	550	0	10	0	0	0		
5832	54	3	1944	0	36	0	0	0	3	1008
		5	1166	2	21	3	162	3	5	1720
		7	833	1	15	3	162	3	7	2464
		9	648	0	12	0	0	0	9	3238
	108	11	530	2	9	9	486	9	11	
5618	53	3	1872	2	35	1	53	1	3	990
		5	1123	3	21	1	53	1	5	1690
		7	802	4	15	1	53	1	7	2422
		9	624	2	11	7	371	7	9	3184
	106	11	510	8	9	7	371	7		
5408	52	3	1802	2	34	2	104	2	3	972
		5	1081	3	20	4	208	4	5	1660
		7	727	4	14	6	312	6	7	2380
		9	600	8	11	5	260	5	9	3130
	104	11	491	7	9	5	260	5		

The Table of Battallions reduced out of Broad squares or hearits.

1	2	3	4	2	3	4
7442	3	2738 2592 2048	64	5	1458 1458 1458 1458 1568	
7200	3	2450 2450 2312	12	5	1458 1458 1458 1458 1352	16
6962	3	2312 2312 2312	26	5	1352 1352 1352 1458 1458	10
6728	3	2312 2312 2178	60	5	1352 1352 1352 1352 1250	70
6498	3	2450 2450 1568	30	5	1352 1352 1250 1250 1250	49
6272	3	2178 2048 2048	2	5	1250 1250 1250 1250 1250	22
6050	3	2048 2048 1920	42	5	1250 1250 1250 1152 1152	4
5832	3	2048 2048 1682	54	5	1152 1152 1152 1152 1152	72
5618	3	2048 2048 1458	64	5	1152 1152 1152 1058 1058	46
5408	3	1800 1800 1800	8	5	1058 1058 1058 1058 1152	27

The

The Table of Broad squares, or twyfold Battels.

1	2	3	4	5	6	7	8	9	10	11
5202	51	3	1734	0	34	0	0	0	3	934
		5	1040	2	20	2	102	2	5	1630
		7	743	1	14	4	204	4	7	2338
	102	9	578	0	11	3	153	3	9	3076
		11	472	10	9	3	153	3		
5000	50	3	1666	2	33	1	50	1	3	936
		5	1000	0	20	0	0	0	5	1600
		7	714	2	14	2	100	2	7	2296
	100	9	555	5	11	1	50	1	9	3022
		11	490	10	9	1	50	1		
4812	49	3	1604	0	32	2	98	2	3	918
		5	962	2	19	3	147	3	5	1570
		7	687	3	14	0	0	0	7	2254
	98	9	534	6	10	8	292	8	9	2964
		11	437	5	8	10	390	10		
4508	48	3	1502	2	32	0	0	0	3	900
		5	901	3	19	1	48	1	5	1540
		7	644	0	13	5	240	5	7	2212
	96	9	500	8	10	6	288	6	9	2914
		11	409	9	8	8	384	8		
4418	47	3	1472	2	31	1	47	1	3	882
		5	888	3	18	4	188	4	5	1510
		7	631	1	13	3	141	3	7	2170
	94	9	490	8	10	4	188	4	9	2860
		11	401	7	8	6	288	6		
4232	46	3	1410	2	30	2	92	2	3	864
		5	846	2	18	2	92	2	5	1480
		7	604	4	13	1	46	1	7	2128
	92	9	470	2	10	2	92	2	9	2806
		11	384	8	8	4	184	4		
4050	45	3	1350	0	30	0	0	0	3	846
		5	810	0	18	0	0	0	5	1450
		7	578	4	12	6	150	6	7	2086
	90	9	450	0	10	0	0	0	9	2752
		11	368	2	8	2	90	2		
3872	44	3	1290	2	29	1	44	1	3	828
		5	774	2	17	3	152	3	5	1420
		7	553	1	12	4	176	4	7	2044
	88	9	430	2	9	7	298	7	9	2698
		11	352	0	8	0	0	0		
3698	43	3	1232	2	28	2	86	2	3	810
		5	739	3	17	1	43	1	5	1390
		7	528	2	12	2	86	2	7	2002
	86	9	410	8	9	5	215	5	9	2644
		11	336	2	7	9	387	9		
3528	42	3	1176	0	28	0	0	0	3	792
		5	705	3	16	4	168	4	5	1360
		7	504	0	12	0	0	0	7	1960
		9	393	0	9	3	126	3	9	2590
	84	11	320	8	7	7	294	7		

The Table of Battallions reduced out of Broad squares.

1	2	3	4	2	3	4
5202	3	1682 1682 1800	38	5	1058 1058 1058 1058 968	2
5000	3	1800 1800 1352	24	5	1058 968 968 968 968	70
4812	3	1568 1568 1682	6	5	968 968 968 968 882	58
4508	3	1568 1568 1352	20	5	882 882 882 882 968	12
4418	3	1458 1458 1458	18	5	882 882 882 882 882	8
4232	3	1458 1458 1250	66	5	800 800 800 882 882	68
4050	3	1250 1250 1568	18	5	800 800 800 800 800	50
3872	3	1250 1250 1352	20	5	800 800 800 722 722	28
3698	3	1352 1352 968	26	5	722 722 722 720 800	10
3528	3	1250 1250 968	60	5	722 722 722 722 648	8

The

The Table of Broad-squares, or Hearst Battels.

1	2	3	4	5	6	7	8	9	10	11
		3	1120	2	27	1	41	1	3	774
	41	5	672	2	16	2	82	2	5	1330
3362		7	480	2	11	5	205	5	7	1918
	82	9	372	5	9	1	41	1	9	2536
		11	305	7	7	5	205	5		
		3	1066	2	26	2	80	2	3	756
	40	5	640	0	16	0	0	0	5	1300
3200		7	457	1	11	3	120	3	7	1876
	80	9	355	5	8	8	320	8	9	2482
		11	290	10	7	3	120	3		
		3	1014	0	26	0	0	0	3	738
	39	5	608	2	15	3	117	3	5	1270
3042		7	434	4	11	1	39	1	7	1830
	78	9	338	0	8	6	234	6	9	2428
		11	276	6	7	1	39	1		
		3	962	2	25	1	38	1	3	720
	38	5	577	3	15	1	38	1	5	1240
2888		7	412	4	10	6	468	6	7	1792
	76	9	320	8	8	4	312	4	9	2374
		11	262	6	6	10	380	10		
		3	912	2	24	2	74	2	3	702
	37	5	547	3	14	4	148	4	5	1212
2738		7	390	8	10	4	148	4	7	1750
	74	9	304	2	8	2	74	2	9	2320
		11	248	10	6	8	296	8		
		3	864	0	24	0	0	0	3	684
	36	5	518	2	14	2	72	2	5	1180
2592		7	372	2	10	2	72	2	7	1708
		9	288	0	8	0	0	0	9	2266
	72	11	235	7	6	6	216	6		
		3	810	2	23	1	35	1	3	666
	35	5	490	0	14	0	0	0	5	1150
2450		7	350	0	10	0	0	0	7	1666
		9	272	2	7	7	245	7	9	2212
	70	11	222	8	6	4	140	4		
		3	770	2	22	2	68	2	3	642
	34	5	462	2	13	3	102	3	5	1120
2312		7	330	2	9	5	170	5	7	1624
		9	256	8	7	5	170	5	9	2158
	68	11	210	2	6	2	68	2		
		3	726	0	22	0	0	0	3	624
	33	5	437	3	13	1	33	1	5	1090
2178		7	311	1	9	3	99	3	7	1572
		9	248	0	7	3	99	3	9	2104
	66	11	198	0	6	0	0	0		
		3	682	2	21	1	32	1	3	606
	32	5	409	3	12	4	128	4	5	1060
2048		7	292	4	9	1	32	1	7	1530
		9	227	5	7	1	32	1	9	2050
	64	11	186	2	6	9	288	9		

The Table of Battallions reduced out of the Broad squares.

1	2	3	4	2	3	4
3362	3	1058 1058 1250	4	5	722 648 648 648 648 648	48
3200	3	1058 1058 1058	26	5	648 648 648 648 648 578	30
3042	3	1058 968 968	42	5	648 648 578 578 578 578	12
2888	3	968 968 968	16	5	578 578 578 578 578 578	2
2738	3	968 882 882	6	5	578 578 512 512 512 512	16
2592	3	968 800 800	24	5	512 512 512 512 512 512	32
2450	3	800 800 800	50	5	512 512 512 450 450 450	14
2312	3	800 800 722	10 over	5	450 450 450 400 592 450	
2178	3	722 722 722	12	5	450 450 450 392 392 392	44
2048	3	722 648 648	30	5	392 392 392 392 450	30

The

The Table of Broad squares, or Hearst Battels.

1	2	3	4	5	6	7	8	9	10	11
1922	31	3	640	2	20	2	62	2	3	588
		5	384	2	12	2	62	2	5	1030
		7	274	4	8	6	186	6	7	1488
	62	9	214	4	6	8	248	8	9	1996
		11	174	8	5	7	217	7		
1800	30	3	600	0	20	0	0	0	3	570
		5	360	0	12	0	0	0	5	1000
		7	257	1	8	4	120	4	7	1446
	60	9	200	0	6	6	180	6	9	1942
		11	163	7	5	5	150	5		
1682	29	3	527	1	19	1	29	1	3	552
		5	316	2	11	3	87	3	5	970
	58	7	226	0	8	2	58	2	7	1404
1568	28	3	522	2	18	2	56	2	3	534
		5	313	5	11	1	28	1	5	490
	56	7	244	0	8	0	0	0	7	1362
1458	27	3	486	0	18	0	0	0	3	516
		5	291	3	10	4	108	4	5	910
	54	7	208	2	7	5	135	5	7	1320
1352	26	3	450	2	17	1	26	1	3	498
		5	270	2	10	2	52	2	5	880
	52	7	193	1	7	3	78	3	7	1270
1250	25	3	416	2	16	2	50	2	3	480
		5	250	0	10	0	0	0	5	850
	50	7	178	4	7	1	25	1	7	1236
1152	24	3	384	0	16	0	0	0	3	462
		5	230	2	9	3	72	3	5	820
	48	7	168	4	6	6	144	6	7	1194
1058	23	3	352	2	15	1	23	1	3	444
		5	211	3	9	1	23	1	5	790
	46	7	151	1	6	4	92	4	7	1152
968	22	3	322	2	14	2	44	2	3	426
		5	193	3	8	4	88	4	5	760
	44	7	138	2	6	2	44	2		
882	21	3	294	0	14	0	0	0	3	408
		5	176	2	8	2	42	2	5	730
	42	7	126	0	6	0	0	0		
800	20	3	266	2	13	1	20	1	3	390
		5	160	0	8	0	0	0	5	700
	40	7	114	2		5	100	5		
722	19	3	240	2	12	2	38	2	3	372
		5	144	2	7	3	57	3	5	670
	38	7	103	1	5	3	57	3		
648	18	3	212	2	12	0	0	0	3	354
		5	192	3	7	1	18	1	5	640
	36	7	92	4	5	1	18	1		
578	17	3	192	2	11	1	17	1	3	336
		5	115	3	6	4	68	4	5	620
	34	7	82	4	4	6	102	6		

The Table of Battallions reduced out of the Broad squares.

1	2	3	4
1922	3	648 648 578	48
1800	3	578 578 648	4
1682	3	578 578 512	14
1568	3	512 512 512	32
1458	3	512 450 450	46
1352	3	450 450 450	2
1250	3	450 450 338	12
1152	3	392 392 338	30
1058	3	392 338 338	10
968	3	338 338 288	4
882	3	338 338 200	6
800	3	288 288 200	24
722	3	242 242 242	4
648	3	200 200 242	6
587	3	200 162 200	10
512	3	144 200 162	6
450	3	162 162 98	18
392	3	162 162 72	4

2	3	4
5	392 392 392 392 338	16
5	392 392 338 338 338	2

The

The Table of Broad squares, or two fold Battels.

1	2	3	4	5	6	7	8	9	10	11
512	16	3	170	2	10	2	32	2	3	318
		5	102	2	6	2	32	2		
	22	7	73	1	4	4	64	4		
450	15	3	150	0	10	0	0	0	3	300
		5	90	0	6	0	0	0		
	30	7	64	2	4	2	30	2		
392	14	3	130	2	9	1	14	1	3	280
		5	78	2	5	3	42	5	5	520
	28	7	56	0	4	0	0	0		
338	13	3	112	2	8	2	26	2	3	264
		5	67	3	5	1	13	1	0	490
	26	7	48	2	3	5	65	5		
288	12	3	90	2	8	0	0	0	3	246
		5	57	3	4	4	48	4		
	24	7	41	1	3	3	36	3		
242	11	3	80	2	7	1	11	1	3	228
		5	48	2	4	2	22	2		
	22	7	34	4	3	1	11	1		
200	10	3	66	2	6	2	20	2	3	210
		5	40	0	4	0	0	0		
	20	7	28	4	2	6	60	6		
162	9	3	54	0	6	0	0	0	3	192
		5	32	2	3	3	27	3		
	18	7	23	1	2	4	36	4		
128	8	3	48	0	5	1	8	1	3	174
		5	28	4	3	1	8	1		
	16	7	20	4	2	2	16	2		
98	7	3	36	0	4	2	14	2	3	156
		5	21	3	2	4	28	4		
	14	7	15	3	2	0	0	0		
72	6	3	24	0	4	0	0	0		
		5	14	2	2	2	12	2		
	12	7	10	2	1	5	30	5		
50	5	3	16	2	3	1	5	1		
		5	10	0	2	0	0	0		
	10	7	7	1	1	3	15	3		
32	4	3	10	2	2	2	8	2		
		5	6	2	1	3	12	3		
	8	7	4	4	1	1	4	1		
18	3	3	6	0	2	0	0	6		
		5	3	1	1	3	1			
	6	7	2	4	0	0	0			
8	2	3	2	2	1	2	4	2		
		5	1	3	0	0	0			
	4	7	1	0	0	0				

The whole nũber contained in the girdling thet.

The nũber to impale or girdle by.

The marching of remaines of Maniples.

The whole number of remaines of Maniples.

The remaines of maniples or parts.

The Maniples or parts.

The remaines of men out of rank.

The number of rãks, how many.

How many mẽ to march in ranke.

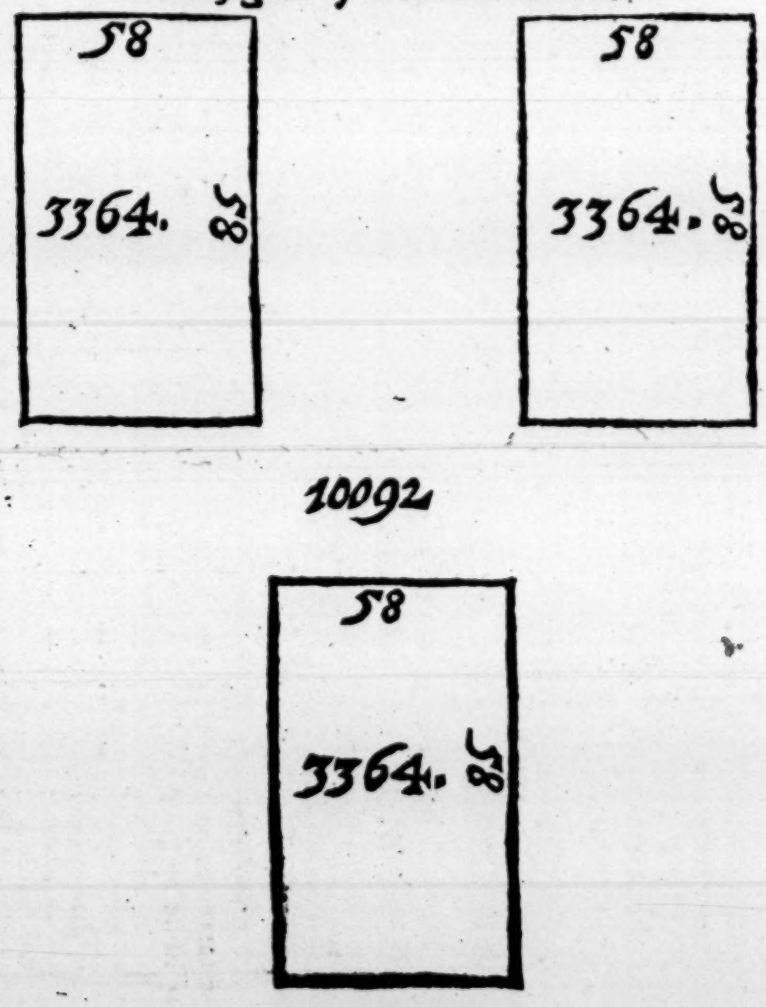
The nũber of mẽ in flanke & front.

The number of pikes to be imbattailed.

Hereafter shall follow the figures and tables of sundry euen Battallions, to sundry vses, &c.

HEre next will I set down the Tables and figures of sundry euen Battallions, as by 3, 5, or 7. euen battalliõs: the which are very strong of themselues; yet neuertheleſſe may you chuſe whether you will fight in the same order of battallions, or, by marching them vp shoulder to shoulder, bring thẽ into a two, or threefold battell, at your owne discretion, or as occasion shall best serue. The number of which seuerall battallions you shall finde (as I sayd before) placed in the Tables of squares of men, or battels in proportiõs of equalitie, on the right side of euery leafe, by drawing your finger downe the first columne of the same, and then considering what number of pikes you haue whereof to deuide your battallions, you shall finde in the 4 columne of your euen battallions, the same number set downe, or a number vnder the same, which (I thinke good) you rather chuse then the iust number, because you may then cast out some remaines to imploy otherwise; for better it is to leaue then to lacke. As for example; here in these Tables of euen battallions, first there is set downe 3 euen battallions containing in each 49 pikes, which being summed together doe make 174 as appeareth in page. 225. Now turne vnto the first table of battels in proportion of equalitie, or euen squares of men, & looking in the first columne of the right side thereof, there shal you find in page 207 the said number of 49, whose square roote is 7: for 7 multiplied in it self is 49: & 7 men & 7 rãks is the square of euery of the said 3 Battalliõs. And in this sort shal you find the order & setting of all the other Battallions, and of all the other numbers: as in these figures next ensuing of 3 Battallions, cõtaining in each 3364 mẽ, whose square roote is 58, so is each Battallion of 58 rankes, & 58 men per ranke: and the whole summe of all these 3 Battallions do amount 10092 pikes, as appeareth in these Tables following in page. 225.

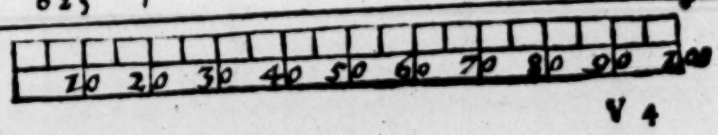
The figure of three Battallions.



The Table of three euen Battalions.

1	2	3	4	5
7 / 7	49	3	49 49 49	174
8 / 8	64	3	64 64 64	192
9 / 9	81	3	81 81 81	243
10 / 10	100	3	100 100 100	300
11 / 11	121	3	121 121 121	363
12 / 12	144	3	144 144 144	432
13 / 13	169	3	169 169 169	507
14 / 14	196	3	196 196 196	588
15 / 15	225	3	225 225 225	675
16 / 16	256	3	256 256 256	768
17 / 17	289	3	289 289 289	867
18 / 18	324	3	324 324 324	972
19 / 19	361	3	361 361 361	1083
20 / 20	400	3	400 400 400	1200
21 / 21	441	3	441 441 441	1323
22 / 22	484	3	484 484 484	1442
23 / 23	529	3	529 529 529	1587
24 / 24	576	3	576 576 576	1728
25 / 25	625	3	625 625 625	1875

1	2	3	4	5
26 / 26	676	3	676 676 676	2028
27 / 27	739	3	739 739 739	2217
28 / 28	784	3	784 784 784	2352
29 / 29	841	3	841 841 841	2523
30 / 30	900	3	900 900 900	2700
31 / 31	961	3	961 961 961	2823
32 / 32	1024	3	1024 1024 1024	3072
33 / 33	1089	3	1089 1089 1089	3267
34 / 34	1156	3	1156 1156 1156	3468
35 / 35	1225	3	1225 1225 1225	3676
36 / 36	1296	3	1296 1296 1296	3888
37 / 37	1369	3	1369 1369 1369	4107
38 / 38	1444	3	1444 1444 1444	4332
39 / 39	1521	3	1521 1521 1521	4563
40 / 40	1600	3	1600 1600 1600	4800
41 / 41	1681	3	1681 1681 1681	5043
42 / 42	1764	3	1764 1764 1764	5292
43 / 43	1849	3	1849 1849 1849	5547
44 / 44	1936	3	1936 1936 1936	5808

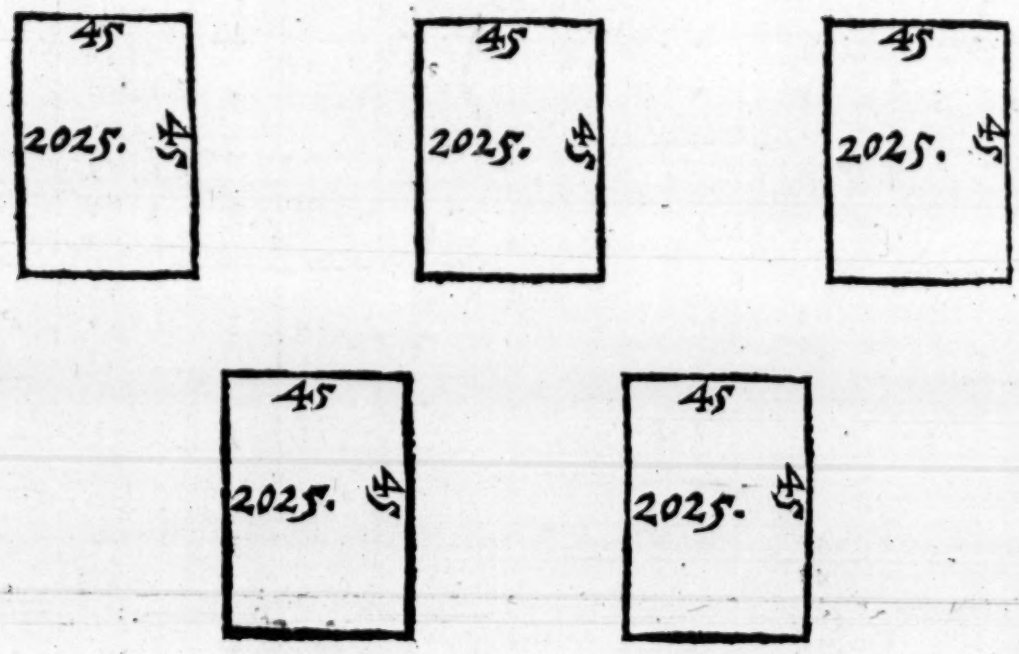


The Table of three euen Battallions.

1	2	3	4	5	1	2	3	4	5
45 / 45	2025	3	2025 / 2025 / 2025	6075	52 / 52	2704	3	2704 / 2704 / 2704	8112
46 / 46	2116	3	2116 / 2116 / 2116	6348	53 / 53	2809	3	2809 / 2809 / 2809	8427
47 / 47	2209	3	2209 / 2209 / 2209	6627	54 / 54	2916	3	2916 / 2916 / 2916	8748
48 / 48	2304	3	2304 / 2304 / 2304	6912	55 / 55	3025	3	3025 / 3025 / 3025	9075
49 / 49	2401	3	2401 / 2401 / 2401	7203	56 / 56	3136	3	3136 / 3136 / 3136	9408
50 / 50	2500	3	2500 / 2500 / 2500	7500	57 / 57	3249	3	3249 / 3249 / 3249	9747
51 / 51	2601	3	2601 / 2601 / 2601	7803	58 / 58	3364	3	3364 / 3364 / 3364	10092

Here after do enſue the figures and Tables of 5 euen Battallions; beginning at the roote of 100, which is 10, and ſo continuing.

The figure of fiue Battallions.



The

The Table of fiue Battalions.

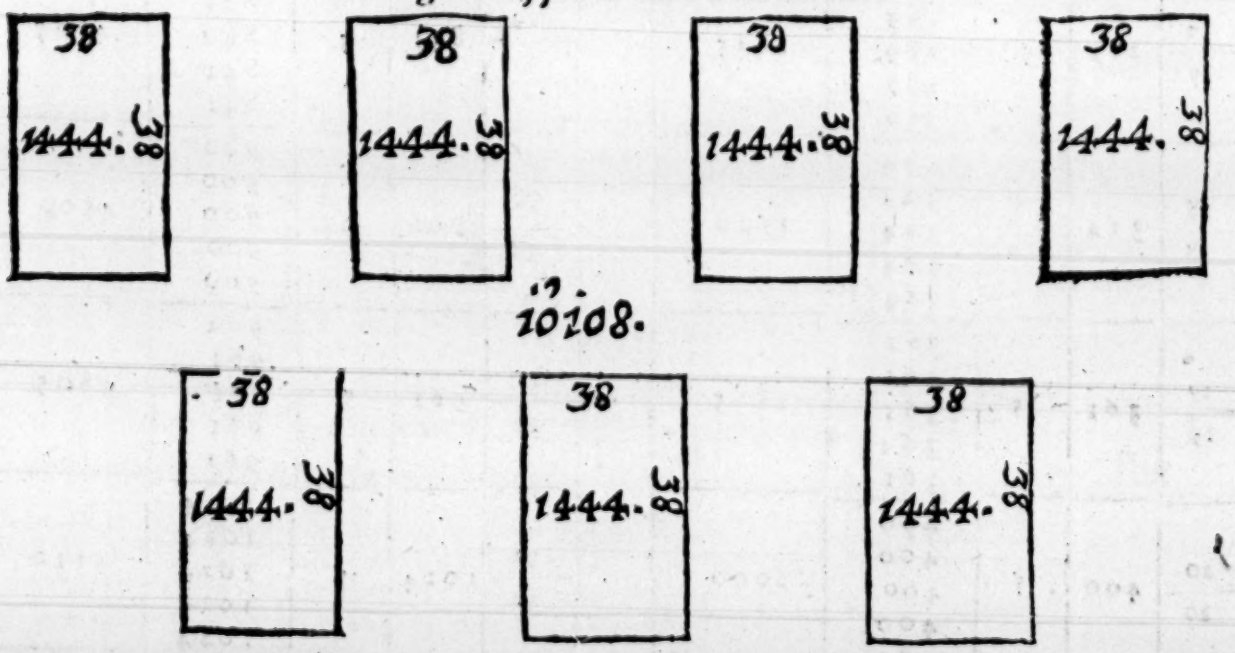
1	2	3	4	5
10 / 10	100	5	100 100 100 100 100	500
11 / 11	121	5	121 121 121 121 121	605
12 / 12	144	5	144 144 144 144 144	720
13 / 13	169	5	169 169 169 169 169	845
14 / 14	196	5	196 196 196 196 196	980
15 / 15	225	5	225 225 225 225 225	1125
16 / 16	256	5	256 256 256 256 256	1280
17 / 17	289	5	289 289 289 289 289	1445
18 / 18	324		324 324 324 324 324	1620
19 / 19	361	5	361 361 361 361 361	1805
20 / 20	400	5	400 400 400 400 400	2000
21 / 21	441	5	441 441 441 441 441	2205
22 / 22	484	5	484 484 484 484 484	2420
23 / 23	529	5	529 529 529 529 529	2643
24 / 24	576	5	576 576 576 576 576	2880
25 / 25	625	5	625 625 625 625 625	3125
26 / 26	676	5	676 678 676 676 676	3380
27 / 27	739	5	739 739 739 739 739	3685
28 / 28	784	5	784 784 784 784 784	3920
29 / 29	841	5	841 841 841 841 841	4205
30 / 30	900	5	900 900 900 900 900	4500
31 / 31	961	5	961 961 961 961 961	4805
32 / 32	1024	5	1024 1024 1024 1024 1024	5120
33 / 33	1089	5	1089 1089 1089 1089 1089	5445

The Table of fiue Battallions.

1	2	3	4	5	1	2	3	4	5
34 / 34	1156	5	1156 1156 1156 1156 1156	5780	40 / 40	1600	5	1600 1600 1600 1600 1600	8000
35 / 35	1225	5	1225 1225 1225 1225 1225	6125	41 / 41	1681	5	1681 1681 1681 1681 1681	8405
36 / 36	1296	5	1296 1296 1296 1296 1296	6450	42 / 42	1764	5	1764 1764 1764 1764 1764	8820
37 / 37	1369	5	1369 1369 1369 1369 1369	6845	43 / 43	1849	5	1849 1849 1849 1849 1849	7245
38 / 38	1444	5	1444 1444 1444 1444 1444	7220	44 / 44	1936	5	1936 1936 1936 1936 1936	9680
39 / 39	1521	5	1521 1521 1521 1521 1521	7605	45 / 45	2025	5	2025 2025 2025 2025 2025	10125

Next after do follow the Tables and figures of 7 euen Battallions, beginning at the roote of 100, which is 10, and so continuing vnto 10108.

The figures of seuen euen Battallions.



As for the shot proportionable vnto euery seuerall Battallion, you may bestow them in small troupes round about euery of them, or otherwise as the ground & occasions shall yeeld best aduantage: the one alwayes to second an other: as also may the seuerall Battallions by good conduction do the like.

The

The Table of seuen euen Battallions.

1	2	3	4
10	100	7	700
11	121	7	847
12	144	7	1008
13	169	7	1183
14	196	7	1373
15	225	7	1575
16	256	7	1792
17	289	7	1923
18	324	7	2268
19	361	7	2527
20	400		2800
21	441	7	3087
22	484	7	3388
23	529	7	3703
24	576	7	4032
24	The number of euery seuerall Battallion.	Battallions how many.	The whole number of the seuen Battallions.
24	The quadrat roote.		

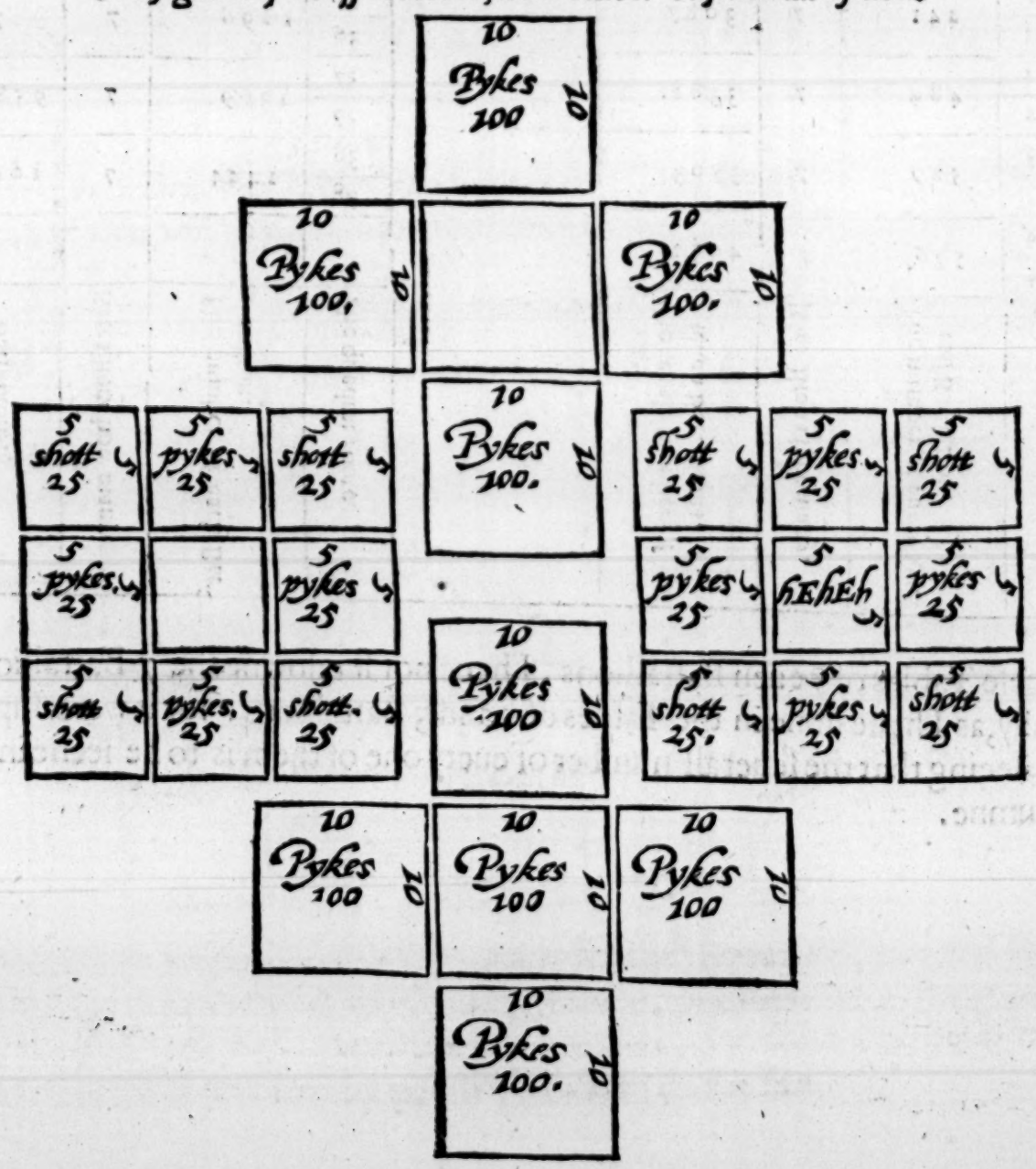
1	2	3	4
25	625	7	4375
26	676	7	4732
27	739	7	5173
28	784	7	5488
29	841	7	5887
30	900	7	6300
31	961	7	6727
32	1024	7	7168
33	1089	7	7623
34	1156	7	8092
35	1225	7	8575
36	1296	7	9072
37	1369	7	9583
38	1444	7	10108
38	The quadrat roote.	Battallions how many.	The whole number of the Battallions.
	The number of each Battallion.		

In these Tables of 7 euen Battallions, I haue not set downe the 7 Battallions seuerally, as I haue done in the Tables of 5 and 3 Battallions: for it were superfluous; seeing that the seuerall number of euery one of them is to be seene in the 2 Columne.

The figures and tables of ſundry Battallions for Croſſe battels.

I Haue here enſuing figured & layd down diuerſe euen Battallions, by 4, 8, 12, or 16, to make a Croſſe battell without filling the center, ſo as euery 4 battallions do make a Croſſe battel with center vnfilled: 8 maketh 2 Croſſe battels; 12 maketh 3, and 16 maketh 4, without filling the center of either of them. Alſo there is for 5 battallions, to make a Croſſe battell with the center filled, 10 to make 2, and 15 to make 3, and 20 to make 4, euen from the root of 5, which multiplied in it ſelf maketh 25; and ſo vpwards vnto 1000, as by theſe figures & tables folowing may appeare. Where in the firſt columne is ſet downe the ſquare root of euery ſeuerall battallion: in the 2 columne, the number contained in euery ſeuerall battallion: in the 3 columne, whether they be ſet by 4 battallions, with the center vnfilled; or by 5 battallions with the center filled: and in the 4 columne, the whole nũber contained in the whole Croſſe battel. In the 5 columne, there is 8 to make 2 Croſſe battels, with the center vnfilled; and 10 to make 2 Croſſe battels, with the center filled. In the 6 columne, the nũber contained in the ſaid croſſe battels. In the 7 columne is 12 to make 3, with center vnfilled; and 15 to make 3 with the center filled. In the 8 columne, the number contained in each. And in the 9 columne is ſet downe 16 to make 4 Croſſe battels with center vnfilled; and 20 to make 4 Croſſe battels with center filled. The 10 columne ſignifieth the number of each of them Croſſe battels. Note, that in the ſaid void ſpaces of the 4 angles of each of theſe Croſſe battels, is to be placed the ſhot belonging to the ſayd Croſſe battels, as in the two other ſmall figures may appeare.

The figures of Croſſe battels, with center vnfilled and filled.



The Table of Battallions for Croſſe Battels.

1	2	3	4	5	6	7	8	9	10
5	25	4	100	8	200	12	300	16	400
5		5	125	10	250	15	375	20	500
6	36	4	144	8	288	12	432	16	576
6		5	180	10	360	15	540	20	720
7	49	4	196	8	392	12	588	16	784
7		5	245	10	490	15	735	20	0980
8	64	4	256	8	512	12	768	16	1024
8		5	320	10	640	15	960	20	1280
9	81	4	324	8	648	12	972	16	1296
9		5	405	10	810	15	1215	20	1610
10	100	4	400	8	800	12	1200	16	1600
10		5	500	10	1000	15	1500	20	2000
11	121	4	484	8	968	12	1452	16	1936
11		5	605	10	1210	15	1715	20	2420
12	144	4	576	8	1142	12	1618	16	2304
12		5	720	10	1440	15	2160	20	2880
13	169	4	676	8	1352	12	2308	16	2704
13		5	845	10	1690	15	2535	20	3380
14	196	4	784	8	1568	12	2352	16	3136
14		5	980	10	1960	15	2940	20	3920
15	225	4	900	8	1800	12	2700	16	3600
15		5	1125	10	2250	15	3375	20	4500
16	256	4	1284	8	2048	12	3072	16	4096
16		5	1280	10	2560	15	3840	20	5120
17	289	4	1156	8	2312	12	3468	16	4624
17		5	1445	10	2890	15	4335	20	5780
18	324	4	1296	8	2592	12	3888	16	5184
18		5	1620	10	3240	15	4860	20	6480
19	361	4	1444	8	2888	12	4332	16	5776
19		5	1804	10	3610	15	5415	20	7220
20	400	4	1600	8	3200	12	4800		
20		5	2000	10	4000	15	6000		
21	441	4	1764	8	3528	12	5292		
21		5	2205	10	4410	15	6615		
22	484	4	1936	8	3872	12	5808		
22		5	2420	10	4840	15	7260		
23	529	4	2116	8	4232	12	6340		
23		5	2645	10	5290	15	7935		
24	576	4	2304	8	4608	12	6912		
24		5	2880	10	5760	15	8640		
25	625	4	2500	8	5000	12	7500		
25		5	3125	10	6250	15	9375		
26	676	4	2704	8	5408	12	8112		
26		5	3380	10	6760	15	10140		
27	739	4	2956	8	5912	12	8864		
27		5	3695	10	7390	15	10185		
28	784	4	3136	8	6272	12	9408		
28		5	3920	10	7840	15	11760		

The Table of Battallions for Crosse Battels.

1	2	3	4	5	6	7	8	9	10
29	841	4	3364	8	6728	12	10092		
29		5	4205	10	8410	15			
30	900	4	3600	8	7200				
30		5	4500	10	9000				
31	961	4	3844	8	7688				
31		5	4805	10	9610				
32	1024	4	4096	8	8192				
32		5	5120	10	10240				
33	1089	4	4356	8	8712				
33		5	5445	10					
34	1156	4	4624	8	9248				
34		5	5780						
35	1225	4	4900	8	9800				
35		5	6125						
36	1296	4	5184	8	10368				
36		5	6480						
37	1369	4	5476						
37		5	6845						
38	1444	4	5776						
38		5	7220						
39	1521	4	6084						
39		5	7605						
40	1600	4	6400						
40		5	8000						
41	1681	4	6724						
41		5	8405						
42	1764	4	7056						
42		5	8820						
43	1849	4	7396						
43		5	9245						
44	1936	4	7744						
44		5	9680						
45	2025	4	8100						
45		5	10125						
46	2116	4	8464						
46		5							
47	2209	4	8836						
47		5							
48	2304	4	9216						
48		5							
49	2401	4	9604						
49		5							
50	2500	4	10000						
50		5							

THE SECOND DIALOGVE.

VVherein is set foorth the order and rules by going paſes, to know any ſeate or peece of ground: and how to embattell men thereupon, either horſe or foote, according to the proportion of the ſame: with the Arithmeticall rules to the working thereof: with ſundrie other martiall points.

Captaine.

NOw haue I (Gentlemen) finiſhed the figures and tables of moſt ſorts of battels and battallions treated of in theſe our diſcourſes: wherein, if I haue erred (for no man but erreth, ſome more, ſome leſſe, in moſt of our opinions and actions) I ſubmit my labour to the courteous cenſure and reformation of all martiall men better experimented then my ſelfe, crauing of all others an indifferent iudgement; conſidering my intent and purpoſe herein, is not to inſtruct the experimented ſouldier; but to ſhew vnto the vnskilled and willing minded Gentlemen, the moſt points vſed (or well wiſhed to be vſed) and obſerued, in theſe our moderne warres; penned like a ſouldier, and not like a ſcholler: and ſo I pray you accept it.

No man but erreth, ſome more, ſome leſſe.

Gent. Truly (Captaine) wee are to giue you thanks for your great care and paines taken herein, eſpecially ſith you haue, at our entreatie, and for our inſtruction done the ſame. And ſurely in mine opinion, theſe figures and tables may giue a wõderful inſtructiõ & perceiuerance vnto ſuch, as are not thoroughly experimented in moſt of your martial actions: & may alſo greatly aide & helpe all ſuch martial officers as be not perfectly skilled in the art of arithmetik; which art I perceiue to be more important for a ſouldier, then many men would iudge or deeme. And although you haue beene a long time buſied in theſe diſcourſes, at our requeſt, yet let vs entreate you to aunſwere ſome more queſtions and demaundes, which yet we haue in mind to propound, for that we would willingly be inſtructed, in as much as ſhould ſeeme needfull to a ſouldier; for we gather by your diſcourſes, that this our age would ſo require it.

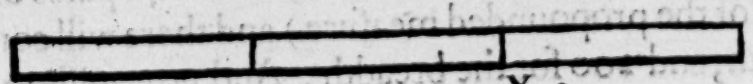
Our age inclineth to warre.

Firſt, therefore we would gladly know the order to bee obſerued to meaſure, only with going paſes, a plat or peece of ground to martiall your men to fight, or ſet a battell thereupon.

Capt. Your demaund is good and neceſſary. Therefore whoſoeuer would with going paſes meaſure a peece of ground to embattell vpon, it is needfull that the skilfull ſouldier doe acquaint himſelfe very well with paſing the meaſure, which is called a geometricall paſe: the which meaſure is deuided into 5 foote of length, and euery foote deuided into 12 inches, as here is to be ſeene deſigned the fourth part of a foot; which is 3 inches (the foote being of 12 inches) as here vnder appeareth.

To accuſtome the going paſe to the geometricall paſe of 5 foote to the paſe.

The foote deuided into twelue inches.



To practiſe the geometricall going paſes.

This being done, the good ſouldier is to put often ſuch meaſure in practiſe, with his ordinarie going paſes: for that he may thereby readily know, how many of his going paſes will make the length of this paſe, after the rate of 5 foot to the paſe: and ſo ſhall he eaſily know, if vpon ſuch ſeate or ground there might be embattailed ſuch a number of men, or ſuch a number of horſe, in ſquadron; knowing the length and breadth which is to be allowed to the ſaid men and horſe. And I will ſuppoſe to giue to euerie pikeman, ſtanding in battell aray, three foote of ground (at the leaſt) for breadth, and 7 foote of ground for length: and vnto euerie horſe, 5 foote in breadth, and 10 foote in length, or more or leſſe, ſo much as ſhall ſeeme good to the skilfull ſouldier. And this practiſe of going paſes ſhall not onely be auaileable to the good ſouldier or Sergeant Maior, for the knowledge of anie ſeate or peece of ground to embattell anie number of men vpon; but alſo to know how to march through anie ſtraights or paſſages, and alſo to encampe an Armie: giuing vnto euerie regiment of horſe and foote their due quarter, with their proportionall places: and to know moreouer, the whole compaſſe or circumference of ſuch encamping; as in our fift booke, folio 155 &c. is at large deſcribed. Now therefore, let vs ſet downe, to arme a peece of ground, or to know what number of men may ſtand vpon the ſame in battell array, hauing firſt made familiar, and bene well practiſed with his going paſes to the proportion of the paſe of 5 foote of meaſure; and ſo that two of his going paſes may make one paſe of meaſure of 5 foote: and let vs ſuppoſe, that ſuch a peece of ground doth containe in length 100 going paſes; which, after two going paſes to one paſe of meaſure, do make 50 paſes of meaſure: and is in breadth 80 going paſes, which are paſes of meaſure 40, as here in this figure ſhall appeare.

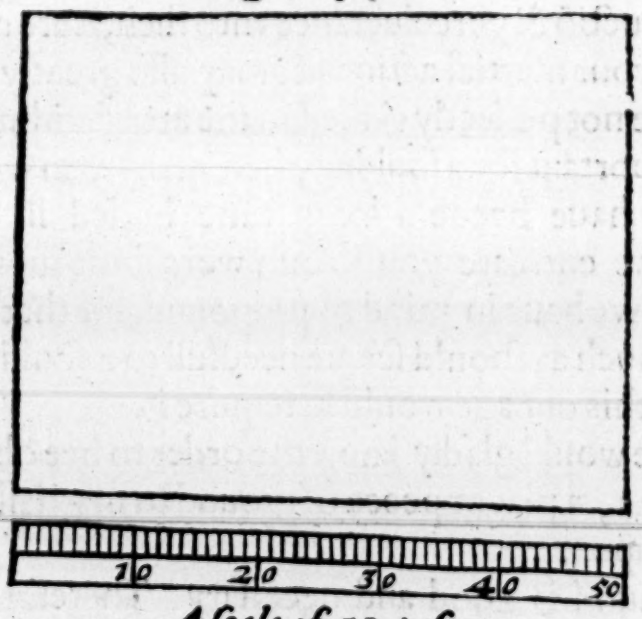
Euery pikeman in aray to fight, will require 3 foote of ground in breadth, and 7 foote for length.

Euery horſeman 5 foote in breadth, and ten foote in length.

The profit to practiſe the going paſes geometricall.

Two going paſes to make a geometricall paſe.

Long 50 paſes.



A ſcale of 50 paſes.

The paſe of ground.

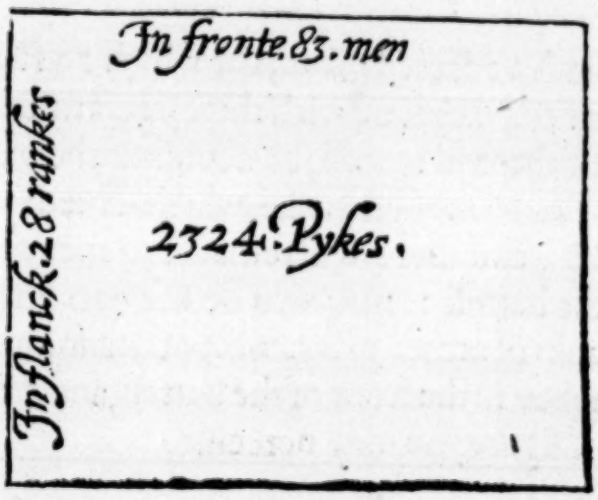
And now to arme and embattell the ſaid ſeate or peece of ground, with pikes armed, and vnarmed. To do this you muſt firſt conſider how many pikes, armed, and vnarmed, will ſerue to arme or embattell vpon the ſayd peece of ground, in this ſort: multiply the 50 paſes of length, and the 40 paſes of breadth, by 5 foote, (the length of the propounded meaſure) and there will come foorth 250 foote for the length, and 200 for the breadth. And now willing to make the head or front

To embattell the ſayd peece of ground.

The rule arithmeticall.

front of the battell, vpon the length of the ſayd ſeate, or peece of ground, deuide the 250 by 3 foote, which is ſuppoſed to allow to euery pikeman for his ſtation in breadth, and it produceth 83 men in ranke for breadth, and 1 foote of ground remaining, the which we make no account of. And of the 200 foote of breadth of ground will we make the ranks in length, by deuiding the ſaid 200 by 7 foot, as is ſet downe, to giue vnto euery pikeman of the breadth for his ſtation of ground, and it produceth 28 rankes of men. So to arme or embattell the ſayd ſeate or ground, it will require 28 rankes, at 83 men by ranke, betwixt pikes armed and vnarmed, if you haue not all armed pikes (the which were farre better if it might ſo be) as in this figure here following ſhall appeare.

40 50
5 5
200 250
750(
250(83 1/3
33
64
200(28 4/7
77



The embattelling the ſame with pikes.

And now to know how many pikes, will ſerue for this peece of ground or how many it will containe in all, you muſt multiply the 28 rankes by 83 men, and it amounteth vnto 2324 pikes, armed and vnarmed: the which number of pikes will ſerue to embattell vpon the ſayd ſeate or peece of ground. And in this ſort may you worke with any other ſeate or peece of ground, and number of men.

The arithmetical rules.

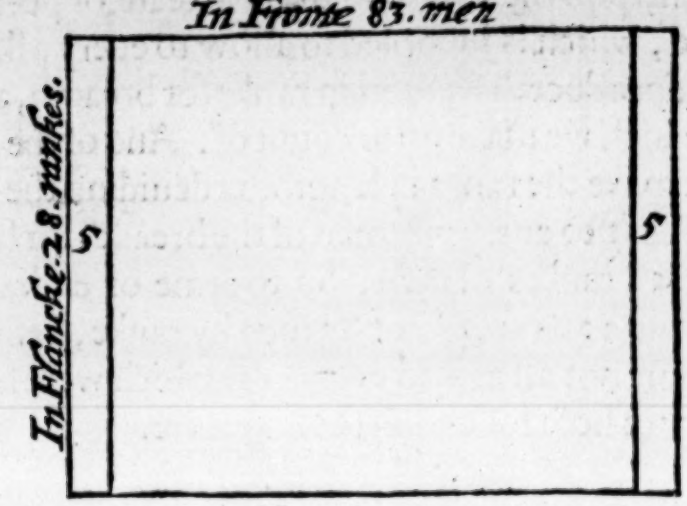
83
28
664
166
2324

And now againe (not hauing all your number of pikes with armed corſlets) if you would arme the ſayd ſeate with an equall proportion of armed pikes, in front, flankes, and rereward: and ſuppoſe that in the ſayd number of 2324 pikes, there be 1200 armed pikes: and to arme the front, flankes, and traine proportionally with the ſayd armed pikes, you ſhall worke in this order: ſumme together the length and breadth of the ſayd battell, that is, 28 with 83, and it amounteth 111. Now ſet downe your rule in this ſort: — if $^{1}_{111}$ — $^{2}_{28}$ — $^{3}_{1200}$. And then multiplying the 28 ſecond with 1200 third, and it commeth to 33600, and this 33600, ſhall bee deuided by 111, *prima*, and it produceth 302 and 78 remaining whereof 100 make noe account. Nowe this 302 ſhall bee deducted out of 1200, and there will remaine 898 armed pikes; and theſe 898 ſhall arme the front and traine of your battell: and the 302 ſhall ſerue to arme the two flankes of the ſayd battell; and then deuiding the 302 by 28, the length or flankes of your battell, and it produceth 10 men *per* ranke of armed pikes to arme the two ſides or flankes: of the which 10 there ſhall be 5 rankes placed on the one flanke, and 5 rankes on the other flanke: as in the figure in the next page appeareth.

To empale the battell with armed pikes.

The arithmetical rule.

28
83
111
111-28-1200
28
9600
2400
33600
x(7
38(8
33600(302
xxxxx
xxx
x
1200
302
898

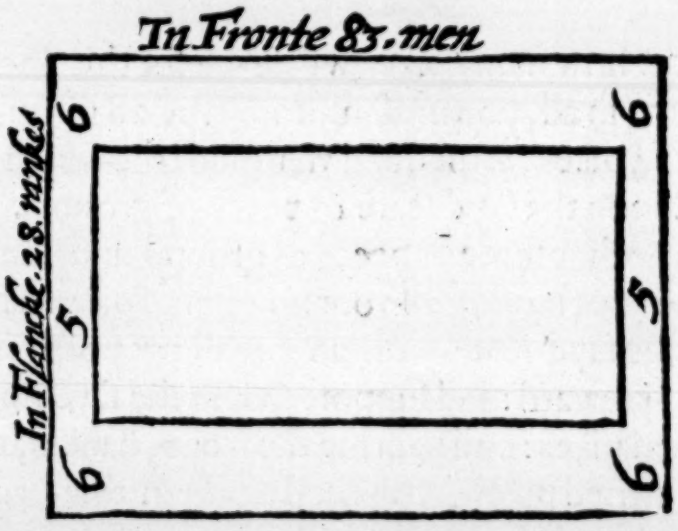


The empalement in flankes.

x(2 .
30(2(10 $\frac{11}{21}$
288
x
898 83
22 10
920 (73
x 5(4
2 9(4
920 (12
733
7

The rule.

And there remaineth 22 armed pikes, the which 22 ſhall be added vnto 898, and it maketh 920 armed pikes: and with theſe 920 armed pikes, you ſhall arme the front and trayne of the ſayd battell, by deuiding the 920 by the breadth: but you muſt firſt deduct the 10 men *per* ranke, which ſerued to arme the two flankes, out of 83 the breadth, and there will remaine 73 men *per* ranke for the inner breadth or front of the battell: now deuide the 920 armed pikes by 73, and it will come to be 12 ranks of armed pikes, and 44 remaining: and of theſe 12 ranks, there ſhall be ſet 6 rankes in the front of the battell, and 6 rankes in the rereward of the battell; as in this figure you may perceiue.

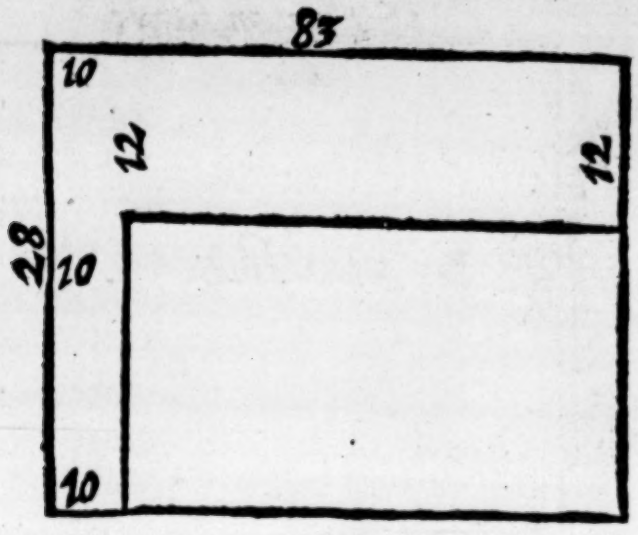


The empalement in flanke, front, and rereward.

And againe, if with theſe 1200 armed pikes, you would arme the one, or two parts of the battell more ſtrong then the reſt, and where you do moſt ſuſpect the enemy; and that the other part or parts ſhall be ſecure and fenced with the nature of the ſeate or ground; then the 10 men *per* ranke, which armed the two flankes, ſhall be placed on the one ſide or flanke onely, where you ſhall ſee moſt occaſion: and the like ſhall bee done with the 12 rankes of armed men, which armed the front and trayne, placing them either all in front, or all in trayne, as ſhall bee found moſt needful, where the enemy is moſt to be ſuſpected, as in the figure following ſhall appeare.

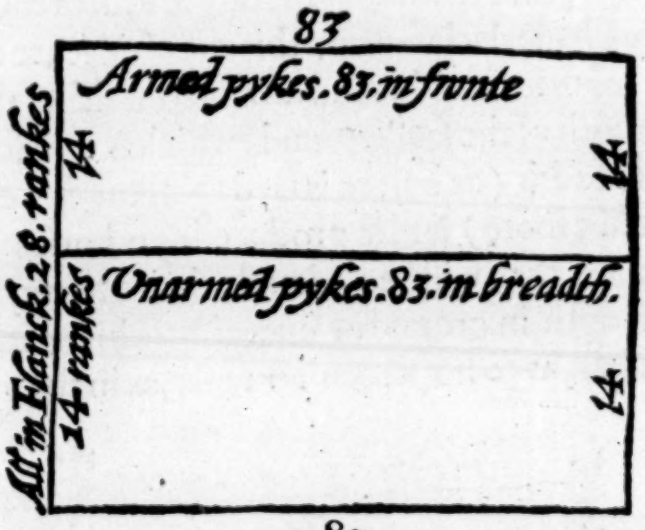
The rule.

And



The empalement in front and on one flanke.

And moreouer, if with the ſayd 1200 armed pikes, you would arme the front of your battell only, then deuide the 1200 pikes by 83, the number of men in front, and there will come foorth to be 14 rankes of armed pikes for the front, or head of the battell only, as in this figure following may be ſeene. *The rule.*



The front armed onely.

And there remaineth 38 armed pikes, the which ſhall be placed, where the Sergeant Maior ſhall thinke moſt conuenient, within the body of the battell.

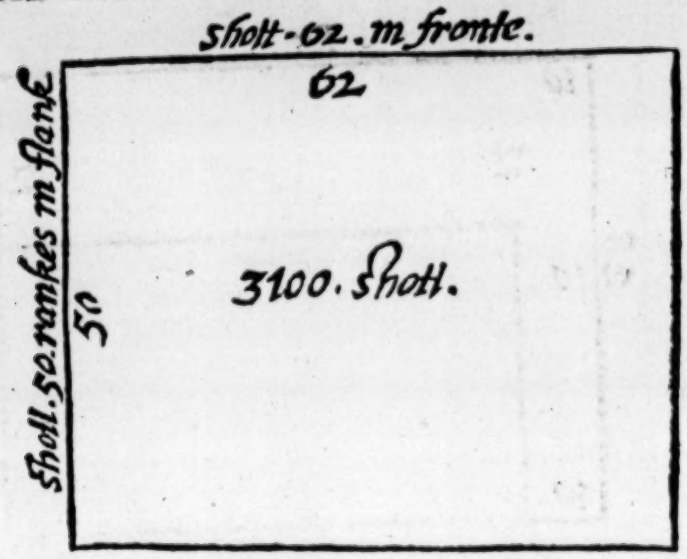
Gent. We haue ſufficiently vnderſtood the order how to arme or embattell a peece of ground with pikes onely: wherefore I pray, ſhew vs now how to embattell the ſame ſeate or ground with ſhot or horſemen.

Capt. Sir, to arme or imbattell a ſeate or peece of ground with ſhot, or horſe, you muſt multiply the length of the ſayd ſeate, and alſo the breadth of the ſame by 5 foote: putting downe (as is aforeſayd) for the length, 50 paſes, and for the hreadth 40 paſes: & it produceth for the length 250 foote, & for the breadth, 200 foote. And now to know how many ranks, and how many ſhot *per* ranke will ſerue for this ground, you ſhall deuide the 250, and alſo the 200 foote by 4 foote, as before is ſaid, to allow for euery hargubuzier his ſtation of ground, 4 foote for length, and 4 foote for breadth. Then reparting 250 foote by 4, it produceth 50, not reckening the ouerplus: and willing to make the head of front or your battell vpon the longeſt breadth or part of the ſeate of ground, your front will come to containe 62 ſhot in front, and 50 rankes in flanke, as here in the figure following may appeare.

To arme the ſayd peece of ground with ſhot or horſemen.

The rule.

4 foote for length, and 4 foote for breadth to euery ſhot for his ſtation of ground.



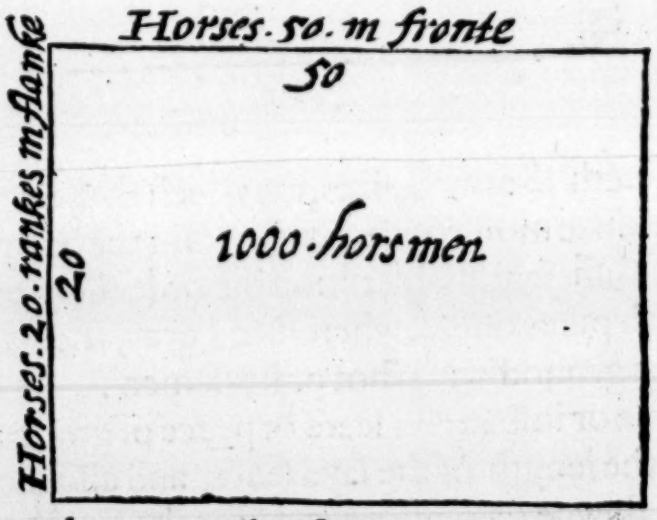
Armed with shot.

The number of shot contained.

And now to know how many ſhot this peece of ground ſhall containe in this ſort, multiply the 50 rankes by 62 ſhot, and it maketh 3100 ſhot, which 100 ſhot, ſerueth to arme the ſayd peece of ground, as appeareth. And againe the like is to be done if you would embattell the ſayd ſeate or ground with troupes of horſemen: hauing firſt reduced the length and breadth of the ſayd ſeate or ground into feete, as before I haue declared, and this aforeſaid ſeate containeth 250 foote in length, and 200 foote in bredth. And now if you will ſet the front of your horſe battell vpon the length of the ſayd ground, which is 250 foote, then deuide the 250 by 5 foote of breadth (as before is ſayd to allow for euery horſe his ſtation in breadth of ground 5 foote) and it produceth 50 horſes in ranke; and then to know how many rankes they will bee, deuide the 20 foote, by 10 foote (as aboue is allowed for the length in ground of euery horſe his ſtation, or roome) and it produceth 20 rankes, at 50 horſemen *per* ranke, as in the figure following ſhall appeare.

To embattell the ſame with troops of horſemen.

The rule.



The number of horſemen.

And finally to know how many horſemen (after the former calculation) will ſerue to imbattell vpon the ſayd ſeate of ground, you ſhall multiply the 50 horſe by 20 rankes, they will make 1000 horſe and the ſayd 1000 horſe will arine or imbattel the ſayd plat or peece of ground, at 20 rankes and 50 horſe *per* ranke. And in the like ſort may any other peece of ground bee (after this maner) imbattelled or armed, with either pikes, ſhot, or horſe. And to conclude, hauing theſe rules perfectly in memory, and being well practiſed with your going paſes, you may imbattell any number of men according to the ſeate or ground, with either foote, or horſe; or with both, as occaſion ſhall ſerue, and the quality of fight

fight require. And thus I thinke, I haue ſatisfied your requeſtes, and aunſwered your demaunds.

Gent. Truly ſo you haue; to our great contentation, and good inſtructions; and to your great trauell and paines: for the which wee reſt greatly beholding and much bound vnto you: but (if I remember my ſelfe well) you haue ouer paſſed ſome orders of imbattailings; whereof you made ſome mention before: as the Diamant, the Wedge, the Sheeres, and Saw battels: and alſo of the Snayle forme, the S, D, or G, battels.

Capt. I haue abſtained to ſpeake much of theſe ſorts of battels, becauſe I ſuppoſe them to be battels of ſmall force for any maine fight, eſpecially as our wars are now conducted. And for the Diamant, the Wedge, the Sheeres, and Saw battels, I haue ſayd ſufficiently of them already in my third booke, folio 77, 78, 79, and ſo continuing: ſuppoſing theſe before ſet downe ſufficient. And if occaſion fall out for the vſe of the others, the very Nouices in military profeſſion do know, that without any difficulty at all, they may eaſily be framed, and that ſuddainely out of the very order of marching. But in the others you may behold how with skilfull and orderly practiſe, the benefit of this readineſſe ſhall quickly diſtinguiſh and manifeſt vnto vs, the parts incident vnto a right perfect ſouldier: which for 3 principall reaſons I haue the rather deemed to be amongſt vs moſt neceſſarily required. The one is, for that the often exerciſe thereof inureth a ſouldier to ſuch perfection as is required; another is, for that it is not meete the enemy ſhould at any time ſtand aſſured, in what order we will fight, to the ende that he ſhould not reape ſuch aduantage from vs, as to frame a battell correſpondent to any of our certaine proportions: and the third is, that according to the ground, ſtraights, or paſſages, we may reduce our battell or battallions to the conuenient proportion thereof.

The benefit of practiſe and readineſſe.

The parts incident to a perfect ſouldier, to be moſt neceſſary for 3 reaſons.

Gent. Theſe (in mine opinion) are good conſiderations and reaſons; but yet (good Captaine) ere you conclude all, let vs vnderſtand of you what orders are obſerued in Cytadels, Caſtles, and Forts of defence, hauing garriſons in the ſame.

Capt. What I haue ſeene obſerued in places of ſtrength in other countries, I will ſhew you in our next Dialogue following.

The Election, charge, office and dutie of a Castellano, or Captaine of a Citadell, Castell, Fortresse, or fortified towne, or any other such place of defence.

THE THIRD DIALOGVE.

Wherein is set foorth the parts to be required in a Captaine of a Castell: his loyalty, duty, and charge: his care in time conuenient, for all necessaries and munitions: the duty of the souldiers in the defence therof: the order in setting the watch, and placing the Sentinels; with relieuing of the same: with the shutting in of the gates, and their opening againe.

Captaine.

Vpon whom the guard of Castels ought to be bestowed

THE guard and keeping of Citadels, Castels, Fortresses, strong Townes and Fortes, are (or ought to be) bestowed vpon such personages, whose vertue, valour, experience, wisdome, constancy, and (aboue all) loyaltie, shall merite and best befit the same. And therefore (in mine opinion) the guard and custody of such places, ought to be bestowed and incommended vpon such Captaines and old seruitors, as haue in martiall affaires and actions, spent the greatest part of their time: and whose vertue, valour, magnanimitie, resolution, and (as I sayd) aboue all, loyalty, hath in all the courses of their military life bin well proued, shewed, and made manifest to the world.

Fauor and affection in our age carieth all.

Gent. Truly (in mine opinion) it should bee so indeede, but yet we see that in our age such choyses are not so made, but rather fauour and affection commonly carieth all: to the preiudice (no doubt) of many approued old souldiers, and men best befitting the place.

Capt. Well, how they are bestowed and incommended, I haue not now to speake; but how (in mine opinion) they should be, and vpon what sort of men, I haue already sayd: which would be no small encouragement vnto all braue minded men, which follow warres, to singular themselues therein; seeing and knowing that their vertues, valour, and good cariage in seruice, should in the end be regarded, commended, and rewarded.

Rewarde for seruice a great encouragement to soldiers.

Gent. But I pray what particular parts would you wish to be in one chosen to this charge and office?

Parts to bee desired in a Captaine of a Castell or fortresse.

Capt. First, I could wish that such should be personages issuing from Gentle and Noble bloud; or men whose noble actions, and vertues haue enobled themselues: of both the which sorts, there might be many examples recited, but time permitteth me not. And besides the former nobility, the Captaine of such a Castell or Fort, ought to be loyall, valiant, vigilant, ready, resolute, and experimented

mented in all occurrants of warre; whereby he might both foreſee the enemies deſſeignes, preuent their pretences, and reſolutely reſiſt their attempts; and to be moſt valiant, reſolute, and conſtant in the very points and pinches of furious batteries, fierce aſſaults, and daungerous mineworkes: whereby the ſouldiers imitating their Captaine, ſhall ſhew themſelues the like: by the which valour, conſtancy, and vertue, both of Captaine and ſouldiers, many places of defence, hauing bin made open by battery, and attempted by fierce aſſaults, haue neuertheleſſe beene wonderfully and valiantly defended and kept, to their immortall praiſe, and their Princes profit and honour. And on the contrary, if the Captaine be careleſſe, cowardly, inſolent, diſloyall, and trayterous, the end of his actions are diſhonour, ſhame, and confuſion vnto himſelfe, and great loſſe and hinderance vnto his Prince; of both which ſorts many examples might be produced, to the prayſe and honour of the firſt, and to the diſhonour and ſhame of the laſt.

The ſouldiers to imitate the Captaine.

The honour of braue men.

The ſhame of cowards.

Gent. But if the Captaine ſhould bee diſloyall, and practiſe any ſecret treaſon with the enemy, are the ſouldiers to obey his orders and commaundes, perceiuing and ſuſpecting the ſame.

Capt. No, in no maner or ſort, for although the ſouldier be bound to obey his Captaine in all military courſes and commaundes (as Lieutenant then to his Prince) ſo long as hee remaineth in the fidelity and true loyalty vnto his Prince; yet hauing once falſified his faith, and loſt his loyalty; and thereby turned from a true ſubiect, a traytor to his Prince & country; they are in no reſpect, to follow or obay him: for at the very point of his firſt conceipt of treaſon, he is no more the Kings liege officer, nor the true Captaine or Commander of his ſouldiers, but is become a ſouldier to the enemie, and an enemy to the Princes ſouldiers.

How farre the ſouldier is bound to obay the Captaine.

The traytor is become ſouldier to the enemy, and enemy to the Princes ſouldiers.

Gent. But what are they to doe, when they ſhall ſee their enſigne to march out before them by their Captaines order and commaund, to ſurrender vp the place.

Capt. As they are not bound to any Captaine except they ſee his authoritie and warrant from their Prince or Generall; ſo being in garriſon in any Caſtell or place of defence, and their Captaine commanding them to iſſue out, and ſo to forſake the place, they are not to obey him therein, without ſeeing an expreſſe order from their Prince or General to that effect: for it is no ſufficent excuſe for them to ſay, that they were deceiued by him, vnto whom they were bound to follow and obey, ſeeing the place to be forſaken, without diſmantelling and razing downe the ſame; and the enemy attending his entrance thereinto; then and in ſuch caſes ſhould the honeſt ſouldier refuſe the ſame, electing and chuſing another chiefe to gouerne and rule them vntill they haue giuen aduiſe thereof vnto their Prince or Generall; valiantly reſiſting all attempts offered by the enemy.

The Captaine being diſloyal what the ſouldiers are to doe.

Gent. If by chaunce vpon any battery or aſſault giuen, their Captaine through puſillanimitie and cowardize, ſhould commaund the ſouldiers to retire, willing them that they ſhould reſerue themſelues to ſerue their Prince in other actions, giuing order to withdraw them within the Citadel, Fort, or Keepe, or vnto any other place, where they might thinke to ſaue their liues without fight or blowes; and ſo yeelding in fine to the enemie: what are they in ſuch caſe to doe?

The Captaine a coward, what the ſouldier is to do.

When ſouldiers are to retire.

Capt. If the Captaine do certainely perceiue & ſee that they ſtand ouer any dangerous mines, or in place ouer open to the fury of the battring Artillery; and vpon theſe occaſions ſhould commaund and conſtraine them to retire and withdraw themſelues, they ought herein to beleeue, to follow, and to obey him: but if they ſhould perfectly know and perceiue, that, onely for cowardize and baſeneſſe of mind, and not conſtrained thereunto by force of the enemies weapon, he ſhould commaund them to ſuch retiring, in ſuch a caſe, they ought not onely, not to obey him, but to turne their weapons vpon him, as againſt a bad officer, and an euill ſeruant of their Prince, and to expect and hope (by valiantly defending the place or breach, like braue men of warre) for better fortune, then they ſhould find within the Keepe of the Caſtell or ſuch other place of retraite: and doing otherwiſe, they are ſure to be eſteemed infamous, and not worthy to cary armes. For many times it hath bene ſeene, that many batteries, and forts and many ſhips and gallions of warre, haue beene loſt and taken by the enemies, thorough onely the cold, and fearefull fighting of the defendants: and many againe haue beene as valiantly defended and kept, by a few braue and reſolute defendants; that the enemie hath beene conſtrained to retire, with diſhonour, loſſe, and ſhame.

When not to retire.

Good Captaines and ſouldiers ought to be eſteemed and honoured.

Gent. Such Captaines and ſouldiers as haue thus behaued themſelues valiant and reſolute, no doubt but the Prince doth, or ought to eſteeme of them, to honor them, and to reward them: but the timerous and cowardly Captaines, and fainting defendants, how is the Prince or Generall to deale with them?

How the bad to be dealt withall.

Capt. Mary to diſpoſe of them according to the quality of their offence, at the leaſt to depoſe them from their charge and place; commaunding them to ſerue as common ſouldiers, vntill they attaine vnto more valour and skill, fit for a valiant Captaine, as did the *Dictator Lucius Quintius Cincinatus*, depoſe from the Conſulſhip, *Lucius Minutius*, for his cold and cowardly cariage againſt *Clodius Gracchus*, Captaine of the *Egues* and *Vulcies* (a people bordering vpon *Rome*.) For a valiant & reſolute Captaine ought neuer to ſurrender the place committed vnto his defence and charge, though thereunto conſtrained by woundes, wants, or ſuch like croſſe accidents of warre, except all hope of reliefe be paſt, and extremities do abound: no, nor then neither but with honourable conditions, as did Sir *Roger VVilliams*, and Sir *Thomas Baskeruile*, with other braue Engliſh ſouldiers and Captaines, at the beſieging of *Sluys*, by the great power of the Prince of *Parma*.

Examples.

A valiant Captaine ought neuer to yeeld except all remedies be paſt.

Vpon honorable conditions.

Sir Roger Williams

Sir Thomas Baskeruile.

Souldiers for defence of a Caſtell to be men of experience.

Diſloyall ſouldiers the loſſe of many places.

And it importeth much, that the ſouldiers alſo, which are to be choſen and appointed for the guard and defence of any fortreſſe, towne, or Caſtell, ſhould be men of good experience in warres, wiſe, ſober, valiant; and aboue all, to haue no ſigne nor tatch of diſloyalty or treaſon. For many times diſloyall ſouldiers haue bin cauſe of the loſſe and ruine of many ſtrong places, yea in deſpight of their Commanders and Captaines teeth.

The Captaine to entreate his ſouldiers kindly.

And to the end that his ſouldiers commit no ſuch foule diſloyalties, or any diſordered mutinies, it behoueth the Captaine to entreate them well, and with all humanity and kindneſſe; thereby binding them rather to looſe their liues in defence of his reputation and honor, then to commit any vilety or treaſon, as many times hath bin ſeene.

Alſo

Alſo the Captaine of a Caſtell or Fortreſſe, ought to prouide and procure all things neceſſary and fit for defence of the place, as wel for the munition & artillery, as for all prouiſion of victuals conuenient for their maintenance and foode: alwayes ſoliciting his Prince for the ſame; & that in good & conuenient times, that nothing be found wanting in time of neede & ſeruice: through which negligence, many times ſundry ſtrong Forts haue bin loſt, & many braue actiõs ouerthrowne; whereof we haue too many examples extant before our eyes.

To be careſull for all neceſſary prouiſions.

Wants in time of neede do hinder great actions.

Moreouer it behoueth the Captaine not to be ouer credulous: for many haue bin deceiued by coũterfeit letters & falſe meſſages, as was Captaine *Sanſier*, who being at the guard & defence of *San Deſyre* for *Francis* the *French* king, & being beleaguerd by the Emperor *Charles* the fift, by meanes of counter feit letters, ſurrendred vp the place, to the dammage of his king, and to his owne reproch & diſhonour. The like ſtratageme was practiſed by the *Marquis de Guaſto* vnto *Carolus Druſio*, Captaine of *Mondeuy* in *Piemont*; ſurrendring thereby the place committed to his charge.

Not to be ouer credulous.

Captaine Sanſier deceiued.

Marquis de Guaſto, to Carolus Druſio at Mondeuy.

Gent. If the Captaine do chance to dy, or be ſlaine in the defence of this Caſtel, what orders are the ſouldiers to obſerue in their gouernement thereof, vntil their Prince do giue other order and commaund?

Capt. The ſouldiers in garriſon within ſuch Fortreſſe or place of defence, are to elect & chuſe the moſt ſufficient & principalleſt man amongſt them (except there be any Lieutenant, ſon, or other kinſman of the ſayd Captaine, vnto whõ by right the ſame doth appertaine) & ſuch one preferred before the reſt, him to ſweare, according to the cuſtome, to be loyal & true, & to do his beſt to defend the ſame frõ the enemies: & alſo to render the ſame again vnto the Prince or Lord therof, whẽ ſoeuer it ſhall be demanded. The like order is to be taken by the Captaine of the Caſtel, towne, or Fortreſſe, with his Lieutenant, if at any time, vpon occaſion, he is to depart out of his place of charge.

The Captaine ſlayne or dye, the ſouldiers what to doe.

Gent. And if it fortune that the Captaine be taken by the enemy at any ſallying forth; & the enemy would conſtraine him to deliuer vp the ſayd place, is the Lieutenant and ſouldiers bound to obey him, if he require the ſame?

Capt. No truly, although they ſhould ſee the enemies to kill & murder him for the ſame: for their fidelity & alleageance is no more due vnto him, being taken, & held priſoner, as it was whileſt he was free, but vnto their Prince, who owe th the Caſtell.

The Captaine being taken, the ſouldiers what to doe.

THE FOVRTH DIALOGVE.

VVherin is declared and recited the orders obſerued by the Spaniards, in the Citadels of Millan and Antwerp: their order of watches, guards and Sentinels: their ſundry viſitings and reuiſitings; and relieuings at ſundry times: the parts and duties of the officers therein: their ſingular care in the good guarding thereof, with ſundrie other Martiall points, neceſſarie to be noted.

Gentleman.

WHat orders are obſerued in the guards and keeping of ſuch Caſtels Forts, and places of defence?

Capt. They are not alike in euery Fort or place; neither is there the like garriſon and places of guard in one, as is in another: therefore I cannot preciſely ſatisfie you herein: for I haue ſeene very little in any of our Engliſh townes of ſtrength and Fortreſſes, for that wee haue very few (*Barwicke* onely excepted:) but to giue you ſome content, I will declare vnto you the orders obſerued by the Spaniards in the Caſtell of *Millan*, which is one of the principalleſt Forts in *Europe*.

Barwike.

The Caſtell of Millan.

The guardes and order of watches obſerued in the Caſtell of Millan.

30 poſtes, and their orders.

There is ordinarily in the Caſtell of *Millan* 30 poſtes, or places of guard, whereof the firſt 15 from 4 to 4 ſouldiers in each, are in the three Rauellins, and in the Tenaza or Keepe, which ſtands without the body of the Caſtell; for being places of moſt importance and trauailes: and the other 15 are within; from 3 to 3 ſouldiers, euery night deuiding euery of them into three quarters, and euery day, as hereafter followeth.

One ſouldier at Sentinell.

Their order at night.

In theſe 30 poſtes doth euery day remaine one ſouldier at the Sentinell; and thoſe that do remaine ouer, are reparted and placed into the 3 Corps de guards of the gates: euery night there entreth foure Caporals into the watch: the one goeth into the Tenaza, with the ſouldiers which are to enter into the ſame; and there doth continue and aſſiſt vntill the next morning, hauing firſt the order giuen him, what he is to doe, if the Alarme be giuen or ſtriken.

The other three do remaine within the body or place of the Caſtell, and are deuided into their quarters. The firſt, in the time of winter maketh his Roũds & coũter Roundes for ſixe houres, with 4 ſouldiers in Round and contra Round. The ſecond roundeth the Modorra, or ſecond watch, for fiue houres; with other 4 ſouldiers in Round and counter Round. And the third doth Round from that expired time, vntill day light or dawning, with other foure ſouldiers in like ſort, in Round and contra Round: in ſuch maner and ſort, that the Sentinels, as well within, as without, are viſited at the leaſt, ten or twelue times euery houre a peece.

The Rounds and counter Rounds.

4 Gunners in the Rauellines.

There entreth into the Rauellynes 4 Gunners for watch; the reſt do remaine within

within the body of the Caſtell. One of the chiefe officers doth keepe his watch euery night vpon the walles, and there are the Caſtellane, his Lieutenant, Captaine, *Alferez* and Sergeant. And neuertheleſſe that which toucheth them by duty, they do euery one giue a turne vpon the walles once euery night, in ſuch ſort, that of all theſe the Sentinels are viſited ordinarily euery night. Two houres before the ſhutting in of the euening, doth the Sergeant ſet the watch; and vntill the gates be ſhut faſt, doth no ſouldier within the Caſtell know where he is to be placed, or his poſt; and in ſetting the ſame, hee goeth with thoſe that are to remaine in the Tenaza and Rauelines: and with theſe there goeth ſixteene other ſouldiers with two Caporals, accompanying and attending vpon the keyes wherewith the porter doth locke the gates, and draw-bridges, and the Sergeant doth taſte and proue with his hand, euery locke ſo locked and ſhut.

Watch vpon the wall.

Setting of watch.

Locking of the gates.

The principall gates and draw-bridges of the Caſtell, are drawne vp, and ſhut in at the edge of the euening; and the *Alferez* doth feele and proue them, and the Lieutenant, and Captaine ſtandeth preſent to ſee the ſame ſo done: and hauing locked and ſhut all faſt and ſure, all theſe three officers, with the Sergeant and twentie ſouldiers do go cary the keyes vnto the Caſtellanes lodging, or vnto the Lieutenants lodging, if the Caſtellane himſelfe bee not within the Caſtell. The Sergeant receiueth and taketh the word from the Caſtellane or his Lieutenant, and giueth the ſame vnto the other officers and Caporals which are of the watch, and then preſently vnto all the other Sentinels, which are firſt vpon the walles within the body of the Caſtell: and vnto thoſe which watch without in the Rauelines and Tenaza, the word is not giuen at all. After that the gates of the Caſtel be ſhut in, there goeth a *Cabo de ſquadra* or Caporal, with two other ſoldiers round about to view and reknowledge the ſame; and to know and ſee what ſtrangers there remaine within; as in the tauerns and victualing houſes, in the butchery, in the bakery, & among the Gun-makers, the Gun-powder-makers, & Armourers and ſuch like. And of all ſuch as he findeth there, he giueth account and notice vnto the Captaine, or *Alferez*, or Sergeant; and theſe againe do aduertiſe the Caſtellane, and in his abſence the Lieutenant. And in the day time a Gunner with an other officer, goeth to reknowledge and view all the Artillery of the Caſtell, as wel thoſe within, as thoſe without in the Rauelines.

The principall gates and draw-bridges ſhut.

The keyes.

The watch word.

To thoſe in the Rauellins the word not giuen at all.

The gates being ſhut in, to reknowledge the place.

In the morning after that the drumme hath ſtriken the *Aluirado*, or breaking vp or diſcharging of the watch, the *Alferes*, with twenty ſouldiers and foure Caporals goeth vnto the lodging of the Caſtellane to receiue the keyes, and then goeth to open the Tenaza, and Rauelines: and then commeth the Corps de guard of the principall gate, and ringeth a little bell to call together and aſſemble thoſe that are at the watch: and after being together, they do open the Caſtell gates, with all the watch and other officers preſent in this maner.

The diſcharging of the watch in the morning.

The Caſtellanes Lieutenant remaineth at the firſt gate, in the inner part thereof, with one troupe or part of the ſouldiers, and the reſt of the guard being iſſued out, they ſhut the ſame againe, and goe to open the ſecond gate, where a Captaine and Sergeant with another troupe of ſouldiers do ſtay and remaine, and then the guard of the third gate being iſſued out with the *Alferez*, they ſhut alſo the ſecond; and doe open none of theſe, neither do the ſouldiers diſarme them-

ſelues, vntill the place of the Caſtell be very well reknowledged and thoroughly viewed.

Orders obſerued in the day time at firſt gate the.

In the firſt gate of the principall bridge, there remaines in the day time 50 ſouldiers at the ward, with a Caporall, who taketh account and charge of the opening and ſhutting thereof; and there is ioyntly with them the *Alferez*, who keepeth account and reckening with thoſe which enter in from abrode: and if it be any ſtranger that commeth for ſome affaires or buſineſſe into the Caſtel, there goeth with euery ſuch, one ſouldier of the guard, notwithſtanding that they haue paſſed thorough the hands of the Lieutenant, or in his abſence through the hands of the Captaine of Infantery.

At the middle gate.

At the middle gate there is another Corps de guard, containing other 30 ſouldiers, with two Caporals, and with theſe doth continually aſſiſt the Lieutenant of the Caſtell, a Captaine of infantery, and a Sergeant. And there is the aſſembly and concourſe of all the ſouldiers; ſo that beſides thoſe which be of the watch, there is continually 70 or 80 other ſouldiers, or more.

At the inner gate.

At the gate within the Caſtell there is 16 ſouldiers, and with them one Caporall.

Their dinner time.

Betwixt ten and eleuen of the clocke in the day time they ſhut the gates, to go vnto their dinner, and then there goeth vpon the walles, eight ſouldiers with an officer, which do go the Round and Contra Round, whileſt the reſt bee at dinner.

Changing their wardes.

The ſouldiers do remaine at their dinner time one houre, and in opening the Caſtell gates againe, they chaunge the poſtes or wardes vntill three of the clocke; and at that houre againe they go and chaunge them afreſh, vntill it bee night.

Order after dinner.

And in the opening of the gates after dinner, they obſerue the ſame order as they did in the morning. They haue a conſideration and reguard, if the day do increaſe or diminiſh, as concerning the deuiding of the houres, and in opening and ſhutting the gates, according to the ſame order.

A little bell at euery watch turret.

There hangeth at euery poſt or watch turret vpon the walles, a little bell at each, of ſeuerall ſoundes, wherewith the Sentinels do anſwer one another euery quarter or halfe houre.

The order of Round and contra Round in the day.

All the day there goeth continually two ſouldiers the Round and Contra Round; the which do chaunge, and are relieued by their quarters (as are in like ſort the Sentinels vpon the walles) hauing a care and reguard vnto the Artillery, and to ſee if any perſons not belonging to the Caſtell, doth come vp vpon the ſame, without licence of the Caſtellane, or his Lieutenant: and finding any ſuch perſon in ſuch manner, they giue knowledge thereof vnto the Caſtellane or vnto his officers, to the end that the cauſe might be knowne why any ſuch doth mount vp vnto the walles.

A regard to the Artillery.

Quarters aſſigned.

Euery one of the Caporals that are within the Caſtell, hath his quarter aſſigned him with his ſquadra, and euery night doth viſite the ſouldiers in the ſame; and ſee whether they haue their bullets, powder, match, and all other armes in a readineſſe; and whether any ſouldier do lodge or ſleepe without the Caſtell by night, without leaue and licence of his ſuperior officer.

And

And euery morning before the opening of the gates, the ſaid Caporals do giue an account particularly vnto the Captaine of al the faults in this ſort committed the which are puniſhed according to the orders that be prouided and made for euery matter concerning the ſayd Caſtell.

Before the opening of the gate, the Caporals duty.

Alſo the higher officers and Caporals haue their quarters deuided & appointed, where euery one doth know whither to repaire with the ſoldiers of his charge, if the Alarme be giuen.

Their order if the Alarme be giuen.

Euery Saturday doth an officer with ſixe ſouldiers go and viſite and reknowledge all the Contra Mines.

To reknowledge the Contra mines.

The Caſtellane hath one key of the cheſt, where all the keyes are locked, and the Lieutenaut keepeth another, to the end that if any ſuddaine occaſion be offered, repaire might be made vnto him which is next at hand: theſe keyes are not the ordinary keyes.

The Caſtellane, one key, the Lieutenant another.

And thus, all theſe things being knowne and well conſidered, any Caſtellane, or Captaine of any Fortreſſe or place of defence, may alter, adde, or diminiſh that which vnto him ſhall ſeeme good, for the good gouernement and defence of his place of charge.

The Concluſion.

Thus hauing finiſhed in fine theſe Military diſcourſes, wherein I haue marched farther then I meant at the firſt, drawne on (Gentlemen) by your diuerſe and curious demaundes, and what reformations I haue herein deſired, or what amiſſes & errors I haue herein committed, I yeelde the ſame to be conſidered and reformed, by the wiſedome of thoſe whoſe experience, authority, and good indeuour, may be anſwerable to the performance therof: deſiring that the ſame may be deemed as proceeding from a ſoldier, who more of zeale then of any deſire to offend, hath penned theſe rough diſcourſes: wiſhing that himſelfe, and all others, may take occaſion thereby to amend what is in euery of vs amiſſe. Beſeeching our heauenly Chieftaine, *Iehouah*, thas as herein, ſo in all other inconueniences, any waie hindering the floriſhing ſtate of our Noble Common-weale, the neceſſitie of this, & euery other action may take ſuch roote in the beholders thereof, as that, with ſuch conuenient regard as they ought, they will endeuour, euery man in his degree, the redreſſe and wiſhed reformation of the ſame; with the due regard of our daungerous times: each honeſt man (of what degree ſoeuer) inueſting himſelfe with the honourable habite of the true feare of God, vnfained loyalty to our good Queene and Prince, perfect fidelity to our countrie, and ſyncere loue and affection to our wiues, children, and friends: and finally reſpecting the generall reputation and honour of our Realme and nation.

Iehouah, our heauenly Chieftaine.

The end of the ſixt and laſt booke.

A Table, ſhewing the ſignification of ſundry forraine words, vſed in theſe diſcourſes.

GEntle Reader, for as much as in theſe Military diſcourſes, I haue vſed ſome words and termes, ſomwhat ſtraunge vnto ſuch as haue not frequented forraine warres, nor haue anie great inſight in forraine languages, I haue therefore thought good both to declare the ſignification of ſuch words, and alſo to ſhew my reaſons for vſing the ſame.

Firſt you are to vnderſtand that moſt of our termes now vſed in warres are deriued from ſtraungers; as the French, the Italian, the Spaniard and the Dutch; wherin euery one almoſt haue their ſeuerall pronuntiation; therefore I hold it good, to vſe ſuch war termes and words, as we do borrow from ſtraungers (as moſt languages doe borrow ſome, more or leſſe, one of another) neare after the ſame nature, orthographie & accent, as thoſe nations do, from whom they are deriued: and not to pronounce and vſe them ouer corruptly, as we commonly doe. As for example. The word *Caporall*, which is a meere Italian, and alſo vſed by the French, we corruptly do both write and pronounce *Corporall*: for *Caporall* doth ſignifie the head and chiefe of a ſquadra, or ſmall company of ſouldiers: and is an officer enſigning and gouerning (in his degree) the ſayd company: and is in Spaniſh more aptly called *Cabo de eſquadra* which is the head of a ſmall ſquadra of 20 or 25 ſouldiers. And againe, wee vſe both to pronoun ce and write, *Core de guard*; which by the French is written *Corps de guard*, and by the Italian and Spaniard, *Corpo de guardia*; which ſignifieth the body of a watch: the which French or Italian word I haue rather vſed in my writing, then our corrupt Engliſh terme. Moreouer wee both pronounce and write the word *Canuaſada*, the which (in truth) ought to be written and pronounced Camiſada, being a Spaniſh tearme; and doth ſignifie the inueſting a ſhirt ouer the ſoldiers apparell or armour; the which is vſed in the night time when any ſuddaine exploit or peece of ſeruice is to be put in practiſe vpon the enemy, vnexpected or vnſeene: to the end, that in the darkeneſſe of the night, the attempters may thereby the better one know and diſcerne another. Theſe few words and termes, I ſuppoſe ſufficient for my reaſons. And for the ſignification of all other ſtraunge and forraine words by me vſed, I will here following particularly ſet downe, in order of alphabet, as I ſhall call them to memory.

A

Abanderado, *is a ſouldier vvhich carrieth the Enſigne in ſteede of the Enſigne-bearer ſometimes.*

Al'arma, *is a vvord vſed among men of vvarre, at times of the enemies ſuddaine approching, and at their diſcouerie, and doth ſignifie, to armes or weapons.*

Alferez, *is a Spaniſh vvord, and ſignifieth the Enſigne bearer.*

Alguazil,

Alguazil, *a Spaniſh vvord, is an officer attendant on the Campe-maiſter Generall, to apprehend offenders, and to ſee execution done.*

Alerta, *an Italian vvord, vſed vnto the ſouldiers, vvhen there is any ſuſpition of the enemy, and ſignifieth to be vvatchfull, carefull and ready*

Alvarado, *a Spaniſh vvord, and is the diſcharging of the morning vvatch, by the ſound of the drumme.*

Ambuſcado, *a Spaniſh vvord, and ſignifieth any troupe or company of ſoldiers either foot or horſe, lodged ſecretly in ſome couert, as in vvoods, hollow vvayes, behind bankes, or ſuch like, to entrappe the enemy ſecretly attending his comming.*

Aquaducts, *are conduits to cary or conuay vvater into any Citie, Caſtell, or Citadell.*

Armada, *a Spaniſh vvord, is a Nauy of ſhips for vvarre, or one great ſhip of vvarre.*

Artillaria, *a forraine vvord, and is that vvhich vve call the great Ordinance.*

B

Bando, *a Spaniſh vvord, and ſignifieth, an act, or law made by the Generall and Counſell of war, in the Campe, and publiſhed by ſound of the drumme or trumpet vnto the ſouldiers.*

Biſognio or Biſonnio, *a Spaniſh or Italian vvord, and is, as vve terme it, a raw ſouldier, vnexpert in his weapon, and other Military points.*

Burgonet, *a French vvord, is a certaine kind of head-peece, either for foote or horſemen, conering the head, and part of the face and cheeke.*

C

Cabo de eſquadra or Caporall, *a Spaniſh vvord, is the head or chiefe vnder the Captaine of a ſmall number of ſouldiers, in number 20 or 25, or more or leſſe, according as the company is deuided into.*

Caporal, *the Italian vvord, is as* Cabo de eſquadra *in Spaniſh.*

Cabo de Camara, *a Spaniſh vvord, is a ſouldier vnder the Caporall, and is the chiefe ouer euery 10 or 12 ſouldiers.*

Camarada, *a Spaniſh vvord, is a ſmall number of 11 or 12 ſoldiers, and is the one halfe of a ſquadra, being vnited together in their lodging, and diet, and friendſhip, the chiefe man of whom is the Cabo de Camara.*

Camiſada, *a Spaniſh vvord, and doth ſignifie the inueſting or putting on of a ſhirt ouer the ſouldiers apparell or armour; the vvhich is vſed in the night time, vvhen any ſuddaine exploit or peece of ſeruice is to be put in practiſe vpon the enemy, vnexpected or vnſeene, to the ende that the attempters may thereby the better one know and diſcerne another.*

Campania, *an Italian vvord, and is a field.*

Campania Raza, *an open field vvithout hedge, ditch, or other incombrance, razed playne.*

Campe-maiſter, *in Spaniſh* Maeſtro del Campo, *is a Colonell: being the chiefe Commander or officer ouer one Regiment or Tertio.*

Camp maiſter Generall, *in Spaniſh,* Maeſtre del Campo *Generall, is a great Commander, and is with vs the high Marſhall of the field.*

Caſtellano, *is the Captaine or Commander of a Citadell, or Caſtel, as in Millan, Antwerp, Metz, and ſuch other places.*

Cannonera, *a Spaniſh word, and is the place or roome where the Cannon is placed in a bulwarke.*

Caſamatta, *a Spaniſh word, and doth ſignifie a ſlaughter-houſe, and is a place built low vnder the wall or bulwarke, not arriuing vnto the height of the ditch, ſeruing to ſcowre the ditch, annoying the enemy when he entreth into the ditch to skale the wall.*

Cauagleria, *an Italian woord, and is the Companies of ſouldiers ſerning on horſebacke, of what ſort ſoeuer.*

Cauaglere, *an Italian word, and ſignifieth a Gentleman ſerning on horſebacke, but in fortifications, a Caualiere is a mount or platforme of earth, built and raiſed high, either within or without the wall for to plant great Ordinance vpon.*

Cauallière à Cauallio, *is a high mount or platforme of earth raised very high, so that the Artillery vpon the same, may shoote ouer the walles and bulwarkes, to scoure and cleare the fields all about.*

Centre, *a French vvord, is the middle of a battell, or other things.*

Centinell, *a Spanish vvord, and signifieth the souldier vvhich is set to vvatch at a station or post, a certaine distance from the Corps de guard, or in a certaine litle garret or vvatch house vpon the vvalles, or at certaine places in the field without the ring of the Campe.*

Centuria, *vvas amongst the Romaines, a companie of Souldiers to the number of* 100: *whose Captaine vvas called Centurio.*

Cohort, *was, amongest the Romaines, the* 10 *part of a Legion.*

Chieffront, *a French vvord, is the arming for the forehead of the horse.*

Conuoye, *a French vvord, is a certaine guard of souldiers, sent to conduct and guard, victuall, victualers, marchants, munition, and such like, from one place vnto another.*

Contra Round, *an Italian vvord, is a certaine number of commanders and officers going, visiting the Corps de guard, vvatches, Sentinels, and also the Roundes, to see if they performe their duties and be vigilant and carefull.*

Colonell or Coronell, *a french vvord, is the commander of a regiment of certaine companies of souldiers, called with the Spaniards Maestre del Campo.*

Contrafront, *or spurre, is the inner part of the vvall of a bulwarke.*

Citadella, *an Italian vvord, is a Castell or spacious fort, built, not onely to defend the City, but also to keepe the same in awe and subiection, as that at Antwerp, Millan, and Naples, &c.*

Cornet, *a French vvord, is the ensigne vvhich is caried by the Launciers.*

Corps de guard, *a French vvord, is the body of a vvatch, of a certaine number of souldiers set for such purposes.*

Corslet, *a French vvord, is the armour of a foote souldier, complete.*

Criniere, *a French vvord, is the armings of the horse mane or necke.*

Cuisset, *is the armings of a horseman, for his thigh vnto the knees.*

Cuyratz, *a French vvord, is the arming of the body, the breast part and backe part only, either of horseman or footman.*

Colours, *a vvord vsed by vs, for the Ensigne, being of variable colours.*

Curtine, *a French vvord, is the long vvall running leuell from bulwarke to bulwarke.*

D

E

Enginero, *a Spanish vvord, is one skilfull in fortifications, and other machines and stratagems for warre.*

Escalada, *a Spanish vocable, and is the skaling of a wall or fort with ladders.*

Esquadra, *a Spanish vvord, is a certaine part of a company of souldiers of some* 20 *or* 25 *souldiers vvhose chiefe is the Caporall.*

F

Fila, *an Italian vvord, is the order, row, or line of all such souldiers as do stand or march consequently on after another, in ordinance or aray of battell, extending from the front vnto the traine of the battell.*

Flancque, *a French vvord, is the side of any squadron of men.*

Fronte, *a French vvord, is the face or forepart of a squadron or battell.*

Front, *is also the forepart of a vvall or bulwarke.*

Forlorne Sentinell, *a compound vvord of Dutch and French: and is a souldier either horseman*

or footeman, ſet to vvatch and eſpie the enemies deſſeignes, neare vnto the enemy, and without the vvord: for ſundry conſideratims.

G

Garrita, *a Spaniſh vvord, is a little vvatch houſe or towre, for the ſouldier to ſtand in at Sentinell, ſeated vpon the walles.*

Grueues, *a French vvord, is the arming for the legges, from the knees downeward.*

Guantlet, *a French vocable, is the arming or gloue to the hand.*

Guidon, *a French vvord, is the enſigne vvhich is borne vvith the ſhot on horſebacke.*

H

Harguburzier *a French vvord, and is the ſouldier, carying and vſing a peece called a calliuer or Hargubuz.*

Harguluttier, *an Italian and French vvord, and is the ſouldier ſerning on horſebacke, vnarmed, vſing a calliuer with a ſnap hance.*

I

Infanteria, *an Italian vvord, is all ſort of foote ſouldiers.*

K

L

Launcier, *a French vvord, is a ſouldier on horſebacke, armed and vſing a Launce for his chiefe vveapon, but not ſo heauily armed, as is the man at armes, and therefore of ſome called a Demilance.*

Legion, *amongſt the auncient Romaines, vvas certaine companies of their people of vvarre: conſiſting of 5 or 6000 footemen, and 300 horſemen.*

M

Maniple, *is a part of ſo many rankes and files of ſouldiers thoroughout a battell or ſquadron of pikes, drawne foorth to march thorough any ſtraight or narrow paſſage.*

Maeſtre del Campo, *vvith the Spaniards, is as our Coronell vvith vs.*

Mayordome, *is vvith the Italian and Spaniard, the ſteward of a houſe; but in vvar he is the ſteward and Guardian of the munition for vvarre.*

Moderne warre, *is the new order of vvarre vſed in our age,*

Miditerraneall, *is Inland countrie, or countries diſtant from the ſea.*

Maritime, *is ſea coaſt countrie, or countries adioyning vnto the ſea.*

N

O

Orecchone, *an Italian vocable, is the part of a bulwarke vvhich is called by ſome, the pome, guard, or ſhoulder.*

P

Parapet, *an Italian vvord, is the vpper part of the vvall, vvhich ſhadoweth the ſouldiers from the ſight and annoyances of the enemy.*

Pendent, *is the bending or ſlopeneſſe of the Parapet outward.*

Pelmell, *a French word, and ſignifieth the mingling of men together, hackling by the boſome one with another.*

Percluis, *a French word, is the grate, either of iron or wood, framed within a gate or port of a citie or Caſtell, to be let fall or ſlipped downe, to barre the enemies entrance.*

Pectron, *a French word: is the arming of the breſt of the horſe.*

Place of armes generall *: is the place of aſſemblie, where the people of warre are ranged in order of battell.*

Phalanx, *a Greeke word: an order of imbattelling of men in one graund ſquare, vſed by the Grecians.*

Pietranelli, *an Italian word, and is the ſouldiers ſeruing on horſebacke, well armed with a paire of Cuyraſſes, and weaponed with a fire-locke peece or ſnap-hance.*

Piſtollier, *a French word, and is the ſouldier on horſe backe, armed as the Pietranell, weaponed with a piſtoll.*

Pouldron, *a French word, and is the ſhoulder arming.*

Poſta, *a Spaniſh word, and is the place or ſtation where the Sentinell ſouldier is ſet to ſtand at guard and watch.*

Q

Quarter, *is the part of a Campe, whereon any companies, or numbers of horſemen or footemen be quartered and lodged.*

Quarteret, *is the diminutiue of quarter.*

R

Ranke, *is the row, order or aray of ſoldiers ſtanding ſhoulder by ſhoulder, extending from flanke to flanke throughout the battell or ordinance.*

Rauelline, or Tenaza, *a Spaniſh word: and is the vttermoſt boundes of the wals of the Caſtell or skances without the walles.*

Rampier, *a French word, and is a fortification or wall of earth.*

Regiment, *a Dutch word, is a number of ſundry companies vnder the charge of a Colonell.*

Recoia, *a Spaniſh word: and ſignifieth the call or aſſembling of the ſouldiers together into the place of armes, by the ſound of the drumme.*

Ronda, *an Italian and Spaniſh word: and is a company of certaine ſouldiers and officers, which do go viſiting the Corps de guards, Sentinels and watches at ſundry houres in the night, to cauſe them obſerue order: and to ſee whether they be vigilant and ready.*

Roupt, *a French word, and ſignifieth the breaking of a ſquadron, troupe, or battell, and turning to flight.*

S

Sallie, *a French word: and is an iſſuing foorth of men to skirmiſh or fight: and is alſo a ſecret iſſue for the ſouldiers to paſſe out of a wall, bulwarke, or fort.*

Srerée, *a French word: and is when the ſouldiers in ſquadron do ioyne and locke cloſe together, thereby to become the more ſtrong.*

Serraceneſca, *a Spaniſh word: and is the percluis or grate of a gate.*

Skance, *a Dutch word: and is a ſmall fortreſſe built of turffe and earth, commonly vſed in the low countries.*

Scalada, *a Spaniſh word, is a skaling of a wall with ladders.*

Spontone, *an Italian word: is a ſmall long inſtrument of iron, ſharpe at the ende, to thruſt thorough anie loade of haie, ſtraw, or ſuch like, to proue if any ſouldiers lie hidden within the ſame.*

Squadra, *a Spaniſh word: and is a certaine part of a company of ſome* 20, *or* 25 *ſouldiers, whoſe chiefe is the Caporall.*

Squadron, *a Spaniſh word, and is a great number of ſouldiers pikemen reduced in arraies to march and alſo is a certaine companie of musketiers framed in order to march of fight, and is alſo a certaine number of men, aranged in order to march, or charge.*

T

Taladro, *a Spaniſh word, and is an inſtrument or engine to mount any peece of ordinance vp into the*

Cariage.

Taisses, *a French vvord, and is the arming of the thighes, annexed vnto the forepart of the Corslet.*

Terraplene, *an Italian vvord, and is the earth that is rampired and filled vp vnto the inside of any vvall or bulwarke.*

Tertio, *a Spanish vvord, and is a Regiment of souldiers.*

Tertiare, *a Spanish vvord, and is to third the pike, either to beare the same vpon his shoulder, or to charge the same ouer hand.*

Trauessa, *a Spanish vvord, and is a flanker of a wall.*

Tragon, *is the reareward of the squadron, or battell.*

Trench, *a French vvord, is the ditch about the vvall.*

Tenaza, *a Spanish vvord, is a little hold or Keepe made of one Curtine or Bulwarke.*

V

Vanbraces, *a French vvord, and is the armings for the arme from the pouldrons downeward to the hand vvrest,*

Vanguard, *a French vvord, and signifieth the forepart of the battell.*

Vollie, *a French vvord, and is vvhen any kind of shot do discharge altogether.*

W

The Word, *vvhich vve call the vvatch Word, and is by the French called Mot de guet, and by the Spaniard En nombre: vvich is a vvord or name deliuered by the Generall or other high Commander, to be giuen vnto other officers and souldiers, standing Sentinell at their postes, vvhereby their vvatches are nightly gouerned, &c.*

Toute Puissance, honneur, glorie & louange, soit à nostre bon Dieu eternel.

FINIS.



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